

***** QUERY RESULTS *****

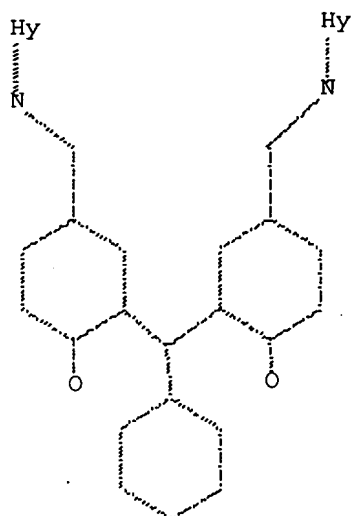
=> d his 15

(FILE 'HCAPLUS' ENTERED AT 13:53:44 ON 31 OCT 2007)

L5 11 S L4

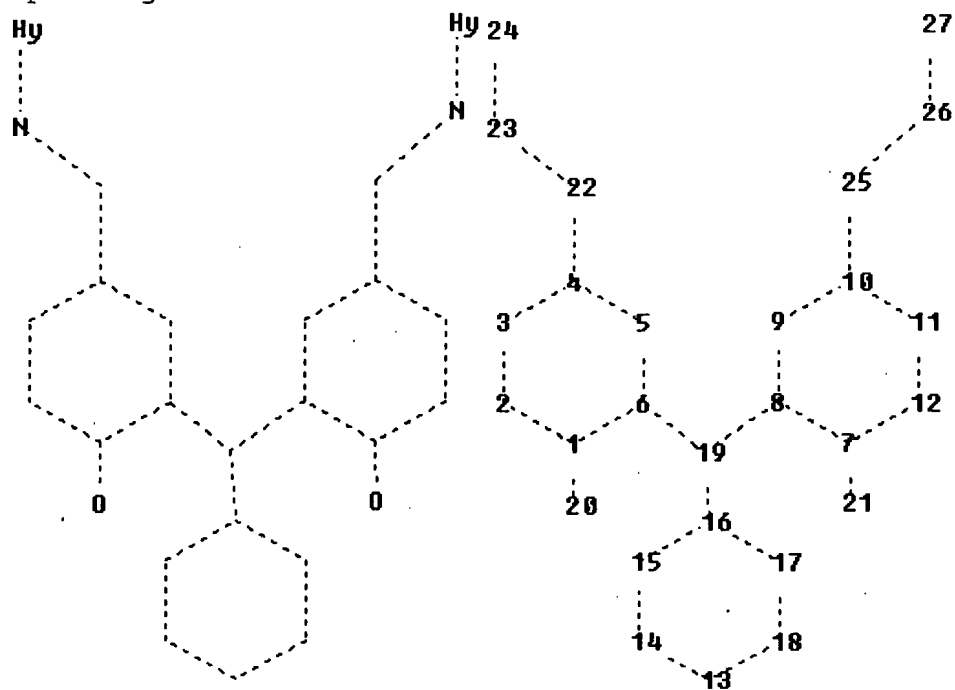
=> d que 15

L2 STR



Structure attributes must be viewed using STN Express query preparation:

Uploading L1.str



chain nodes :

```

19 20 21 22 23 24 25 26 27
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
1-20 4-22 6-19 7-21 8-19 10-25 16-19 22-23 23-24 25-26 26-27
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15
15-16 16-17 17-18
exact/norm bonds :
1-2 1-6 1-20 2-3 3-4 4-5 4-22 5-6 6-19 7-8 7-12 7-21 8-9 8-19 9-10
10-11 10-25 11-12 13-14 13-18 14-15 15-16 16-17 16-19 17-18 22-23 23-24
25-26 26-27

isolated ring systems :
containing 1 : 7 : 13 :

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:Atom 25:CLASS 26:CLASS 27:Atom
Generic attributes :
24:
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic
27:
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

```

```

L4          115 SEA FILE=REGISTRY SSS FUL L2
L5          11 SEA FILE=HCAPLUS ABB=ON PLU=ON L4

```

=> d his l29

```

          (FILE 'BIOSIS' ENTERED AT 14:07:19 ON 31 OCT 2007)
L29          7 S L4

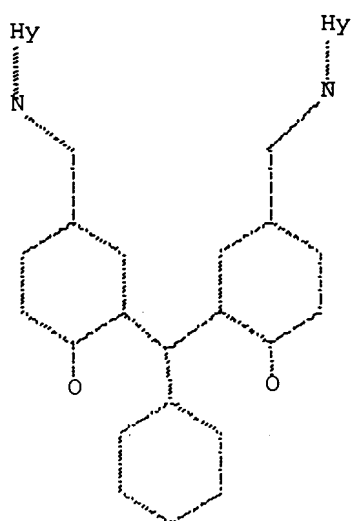
```

=> d que l29

```

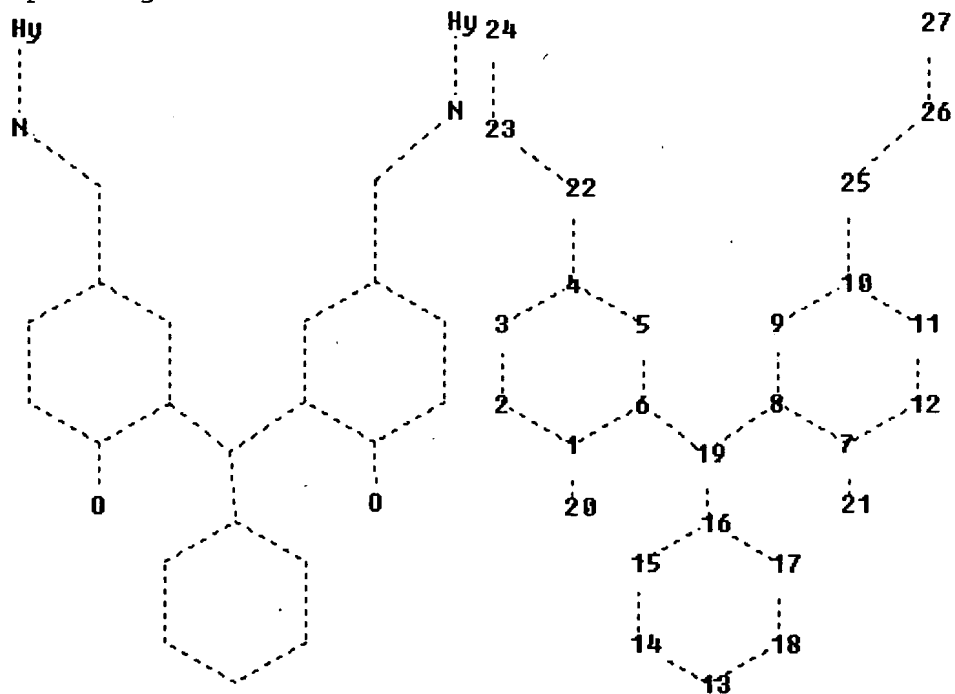
L2          STR

```



Structure attributes must be viewed using STN Express query preparation:

Uploading L1.str



chain nodes :

19 20 21 22 23 24 25 26 27

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

1-20 4-22 6-19 7-21 8-19 10-25 16-19 22-23 23-24 25-26 26-27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15

15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 1-20 2-3 3-4 4-5 4-22 5-6 6-19 7-8 7-12 7-21 8-9 8-19 9-10
10-11 10-25 11-12 13-14 13-18 14-15 15-16 16-17 16-19 17-18 22-23 23-24
25-26 26-27

isolated ring systems :

containing 1 : 7 : 13 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:Atom 25:CLASS 26:CLASS 27:Atom

Generic attributes :

24:

Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

27:

Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

L4 115 SEA FILE=REGISTRY SSS FUL L2
L29 7 SEA FILE=BIOSIS ABB=ON PLU=ON L4

=> dup rem l5 l29

FILE 'HCAPLUS' ENTERED AT 14:18:25 ON 31 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 14:18:25 ON 31 OCT 2007

Copyright (c) 2007 The Thomson Corporation

PROCESSING COMPLETED FOR L5

PROCESSING COMPLETED FOR L29

L52 15 DUP REM L5 L29 (3 DUPLICATES REMOVED)

ANSWERS '1-11' FROM FILE HCAPLUS

ANSWERS '12-15' FROM FILE BIOSIS

=> d l52 1-11 ibib ed abs hitind hitstr; d l52 12-15 ibib ab hitind

L52 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2005:494325 HCAPLUS Full-text

DOCUMENT NUMBER: 143:90328

TITLE: Small molecules VP-14637 and JNJ-2408068 inhibit
respiratory syncytial virus fusion by similar
mechanisms

AUTHOR(S): Douglas, Janet L.; Panis, Marites L.; Ho, Edmund; Lin,
Kuei-Ying; Krawczyk, Steve H.; Grant, Deborah M.; Cai,
Ruby; Swaminathan, Swami; Chen, Xiaowu; Cihlar, Tomas

CORPORATE SOURCE: Gilead, Foster City, CA, 94404, USA

SOURCE: Antimicrobial Agents and Chemotherapy (2005), 49(6),
2460-2466

CODEN: AMACCQ; ISSN: 0066-4804

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 10 Jun 2005

AB Here we present data on the mechanism of action of VP-14637 and JNJ-2408068 (formerly R-170591), two small-mol. inhibitors of respiratory syncytial virus (RSV). Both inhibitors exhibited potent antiviral activity with 50% effective concns. (EC50s) of 1.4 and 2.1 nM, resp. A similar inhibitory effect was observed in a RSV-mediated cell fusion assay (EC50 = 5.4 and 0.9 nM, resp.). Several drug-resistant RSV variants were selected in vitro in the presence of each compound. All selected viruses exhibited significant cross-resistance to both inhibitors and contained various single amino acid substitutions in two distinct regions of the viral F protein, the heptad repeat 2 (HR2; mutations D486N, E487D, and F488Y), and the intervening domain between HR1 and HR2 (mutation K399I and T400A). Studies using [3H]VP-14637 revealed a specific binding of the compound to RSV-infected cells that was efficiently inhibited by JNJ-2408068 (50% inhibitory concentration = 2.9 nM) but not by the HR2-derived peptide T-118. Further anal. using a transient T7 vaccinia expression system indicated that RSV F protein is sufficient for this interaction. F proteins containing either the VP-14637 or JNJ-2408068 resistance mutations exhibited greatly reduced binding of [3H]VP-14637. Mol. modeling anal. suggests that both mols. may bind into a small hydrophobic cavity in the inner core of F protein, interacting simultaneously with both the HR1 and HR2 domains. Altogether, these data indicate that VP-14637 and JNJ-2408068 interfere with RSV fusion through a mechanism involving a similar interaction with the F protein.

CC 1-5 (Pharmacology)

IT 235106-62-4, VP-14637 317846-22-3, JNJ-2408068

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(small mols. VP-14637 and JNJ-2408068 inhibit respiratory syncytial virus fusion by similar mechanisms by binding into a small hydrophobic cavity in the inner core of F protein, interacting simultaneously with both the HR1 and HR2 domains)

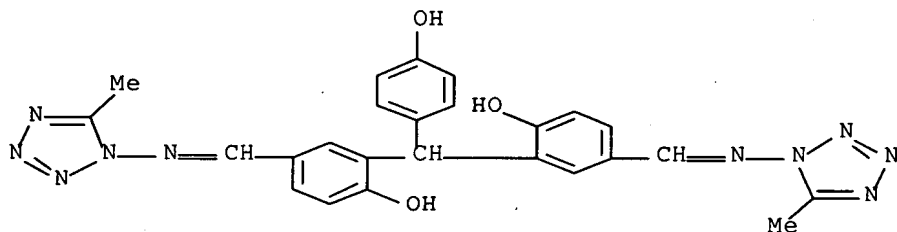
IT 235106-62-4, VP-14637

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(small mols. VP-14637 and JNJ-2408068 inhibit respiratory syncytial virus fusion by similar mechanisms by binding into a small hydrophobic cavity in the inner core of F protein, interacting simultaneously with both the HR1 and HR2 domains)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

25

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2005:1028388 HCAPLUS Full-text

DOCUMENT NUMBER: 143:379155

TITLE: Antiviral efficacy of VP14637 against respiratory syncytial virus in vitro and in cotton rats following delivery by small droplet aerosol

AUTHOR(S): Wyde, Philip R.; Laquerre, Sylvie; Chetty, Srikrishna N.; Gilbert, Brian E.; Nitz, Theodore J.; Pevear, Daniel C.

CORPORATE SOURCE: Department of Molecular Virology and Microbiology, Baylor College of Medicine, Houston, TX, 77030, USA

SOURCE: Antiviral Research (2005), 68(1), 18-26

CODEN: ARSRDR; ISSN: 0166-3542

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 23 Sep 2005

AB VP14637, the lead compound in a series of substituted bis-tetrazole-benzhydrylphenols developed by ViroPharma Incorporated, was evaluated for antiviral efficacy against respiratory syncytial virus (RSV) in vitro in cell culture and in vivo in cotton rats. A selective index of > 3000 (≥ 2000 times greater than that observed for ribavirin) was determined in the in vitro studies for this compound against both RSV A and B subtypes. In cotton rats, animals given as little as 126 μg drug/kg by small droplet aerosol in divided doses starting 1 day after exptl. virus infection with either a RSV A or B subtype consistently had significantly lower mean pulmonary RSV titers and reduced histopathol. findings than mock-treated animals or cotton rats given placebo (vehicle-treated animals). No cotton rat treated with aerosols of VP14637 during these studies manifested any evident untoward responses. Thus, VP14637 exhibited good selective antiviral efficacy both in vitro and in vivo.

CC 1-5 (Pharmacology)

Section cross-reference(s): 63

IT 235106-62-4, VP14637

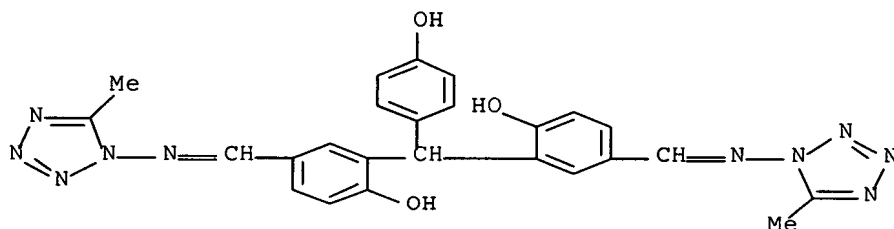
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antiviral efficacy of VP14637 against respiratory syncytial virus in vitro and in cotton rats following delivery by small droplet aerosol)

IT 235106-62-4, VP14637

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antiviral efficacy of VP14637 against respiratory syncytial virus in vitro and in cotton rats following delivery by small droplet aerosol)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[[4-(4-hydroxyphenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2003:742431 HCAPLUS Full-text

DOCUMENT NUMBER: 140:192261

TITLE: Comparison of the inhibition of human metapneumovirus
and respiratory syncytial virus by ribavirin and
immune serum globulin in vitro

AUTHOR(S): Wyde, Philip R.; Chetty, Srikrishna N.; Jewell, Alan
M.; Boivin, Guy; Piedra, Pedro A.

CORPORATE SOURCE: Departments of Molecular Virology and Microbiology,
Baylor College of Medicine, Houston, TX, 77030, USA

SOURCE: Antiviral Research (2003), 60(1), 51-59

CODEN: ARSRDR; ISSN: 0166-3542

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 Sep 2003

AB Human metapneumovirus (hMPV) is a newly recognized pathogen that like its
better-known relative, human respiratory syncytial virus (hRSV), appears to be
ubiquitous and an important cause of respiratory disease in diverse
subpopulations. No antivirals or vaccines are currently approved for the
treatment or prevention of hMPV infections. However, ribavirin is licensed to
treat serious hRSV-induced infections in children and immune globulin designed
for i.v. administration (IVIG) and palivizumab (Synagis), a humanized
monoclonal antibody preparation, have been utilized as alternatives to
vaccines for preventing or reducing the severity of infections caused by this
virus. Because both ribavirin and IVIG have broad viral specificities,
studies were performed to compare the ability of these two agents to inhibit
the replication of hRSV and hMPV in tissue culture-based assays. Two exptl.
chemotherapeutic agents (i.e. VP14637 and JNJ2408068) and different antibody
preps. were included in this testing for comparison. Ribavirin and the IVIG
utilized were found to have equivalent antiviral activity against hMPV and
hRSV. In contrast, except for antisera specifically raised against hMPV, all
of the other materials tested had marked activity only against hRSV.

CC 1-5 (Pharmacology)

IT 36791-04-5, Ribavirin 235106-62-4, VP14637 317846-22-3, JNJ
2408068

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(inhibition of human metapneumovirus vs. respiratory syncytial virus by
ribavirin and immune serum globulin in vitro)

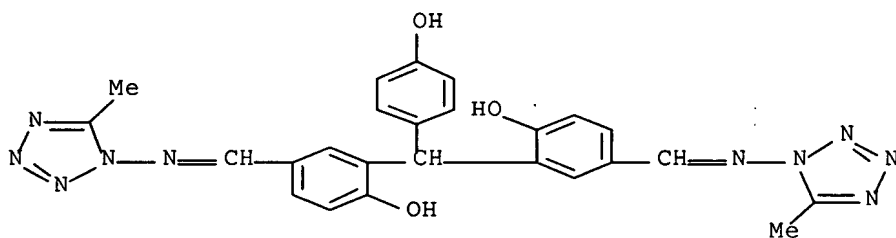
IT 235106-62-4, VP14637

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(inhibition of human metapneumovirus vs. respiratory syncytial virus by
ribavirin and immune serum globulin in vitro)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[5-methyl-1H-tetrazol-1-
yl]imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:647626 HCAPLUS Full-text

DOCUMENT NUMBER: 145:224185

TITLE: Cold virus fusion or stopping fusion cold - inhibitors of the human respiratory syncytial virus F protein

AUTHOR(S): Del Vecchio, Alfred M.; Sarisky, Robert T.

CORPORATE SOURCE: Infectious Diseases Research, Centocor, Inc., Radnor, PA, 19087, USA

SOURCE: Recent Patents on Anti-Infective Drug Discovery (2006), 1(2), 247-254

CODEN: RPADCX; ISSN: 1574-891X

PUBLISHER: Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 05 Jul 2006

AB A review. Human respiratory syncytial virus (HRSV) is a major respiratory viral pathogen causing moderate to severe upper and lower respiratory tract infections in all ages and across a wide range of patient populations. There are no currently approved vaccines and although a number of candidates are in various stages of development, the challenges are quite substantial. Presently, only a single agent is approved for HRSV prophylaxis, and therapeutic treatment options are severely limited and ineffective, particularly in the infant population. Antibody prophylaxis is restricted to use in populations at high-risk for hospitalization (infants under 35 wk gestational age, infants with chronic lung disease, and infants with congenital heart disease). Aerosol administration of the guanosine analog ribavirin has been approved for the treatment of severe HRSV LRTI in both children and mech. ventilated patients; however, there is still debate over its overall benefit and the risks associated with its use. Current therapy for those hospitalized due to HRSV is supportive. As such, there is great medical need for the development of agents to prevent and treat HRSV infections in all populations. Interestingly, many of the discovered agents against HRSV, both neutralizing antibodies and small mol. inhibitors, target the viral fusion (F) glycoprotein. In particular, three distinct chemical classes as exemplified by JNJ-2408068, VP-14637, and BMS-433771, which appear to block conformational intermediates of the viral fusion protein are reviewed.

CC 1-0 (Pharmacology)

IT 36791-04-5, Ribavirin 235106-62-4, VP-14637 317846-22-3, JNJ-2408068 543700-68-1, BMS-433771

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

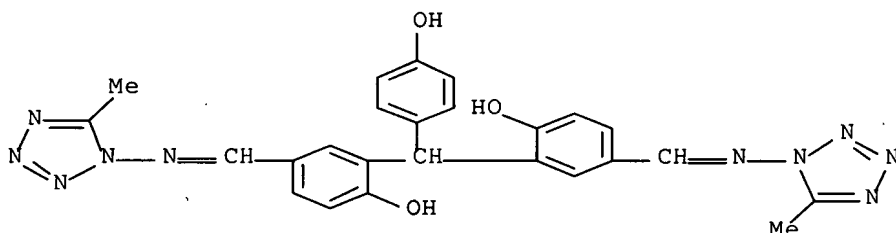
(cold virus fusion or stopping fusion cold - inhibitors of human respiratory syncytial virus F protein)

IT 235106-62-4, VP-14637

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(cold virus fusion or stopping fusion cold - inhibitors of human
respiratory syncytial virus F protein)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:142914 HCAPLUS Full-text

DOCUMENT NUMBER: 140:181453

TITLE: Preparation of 2,2'-(phenylmethylene)bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]phenol] compounds, pharmaceutical compositions, and methods for treating or preventing pneumovirus infection and associated diseases

INVENTOR(S): Rys, David J.; Nitz, Theodore J.; Gaboury, Janet A.; Burns, Christopher J.; Pevear, Daniel C.; Lessen, Thomas A.; Herbertz, Torsten

PATENT ASSIGNEE(S): Viropharma Incorporated, USA

SOURCE: PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

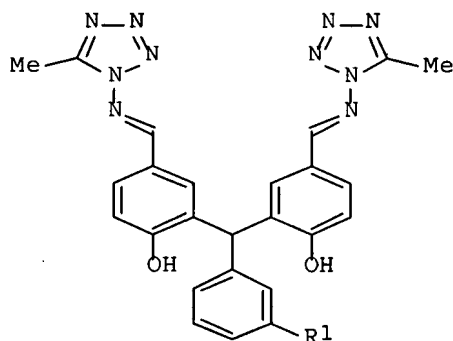
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014317	A2	20040219	WO 2003-US25166	20030811
WO 2004014317	A3	20040415		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2495245	A1	20040219	CA 2003-2495245	20030811

AU 2003258177 A1 20040225 AU 2003-258177 20030811
 EP 1539691 A2 20050615 EP 2003-785209 20030811
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2005288345 A1 20051229 US 2005-524313 20050715
 PRIORITY APPLN. INFO.: US 2002-402402P P 20020809
 WO 2003-US25166 W 20030811
 OTHER SOURCE(S): MARPAT 140:181453
 ED Entered STN: 22 Feb 2004
 GI



AB The title compds. (I; R1 = alkoxy, alkoxyalkyl, halogen, nitro, carboxy, carboxyalkyl, carbalkoxy, carbalkoxyalkyl, carboxamide, carboxamidoalkyl, alkyl, cycloalkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, sulfonamide, amidino, cyano, amino, amido, alkylamino, dialkylamino, alkylaminoalkyl, alkoxy monosubstituted with a substituent selected from the group consisting of carboxy, amino, alkylamino and dialkylamino) and pharmaceutically acceptable salts are prepared. Pharmaceutical compns. and methods are also provided for the prophylaxis and treatment of infections caused by viruses of the Pneumovirinae subfamily of Paramyxoviridae and diseases associated with such infections. The compds. I showed IC50 of 0.1 nM to 1 µM in an cell culture assay for inhibition of Pneumovirus replication using HEP2 cells.

IC ICM A61K

CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 63

IT 660408-49-1P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of 2,2'-(phenylmethylene)bis[[(methyl-1H-tetrazolyl)imino]methyl]phenol] compds. for treating or preventing pneumovirus infection and associated diseases)

IT 660408-51-5P 660408-53-7P 660408-54-8P
 660408-56-0P 660408-58-2P 660408-60-6P
 660408-62-8P 660408-64-0P 660408-66-2P
 660408-68-4P 660408-70-8P 660408-72-0P
 660408-74-2P 660408-76-4P 660408-78-6P
 660408-80-0P 660408-82-2P 660408-84-4P
 660408-86-6P 660408-87-7P 660408-89-9P
 660408-91-3P 660408-93-5P 660408-95-7P
 660408-97-9P 660408-99-1P 660409-01-8P
 660409-03-0P 660409-05-2P 660409-07-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

IT 660409-26-7P 660409-27-8P

(prodrug; preparation of 2,2'-(phenylmethylene)bis[[[(methyl-1H-tetrazolyl)imino]methyl]phenol] compds. for treating or preventing pneumovirus infection and associated diseases)

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

RN 660408-49-1 HCAPLUS

CN1C=NC2=C1N=CN2C=NC3=CC=C(C=C3C(=O)O)C(C4=CC=C(C=C4)C(=O)O)C5=CC=C(C=C5)C6=CC=CC=C6C

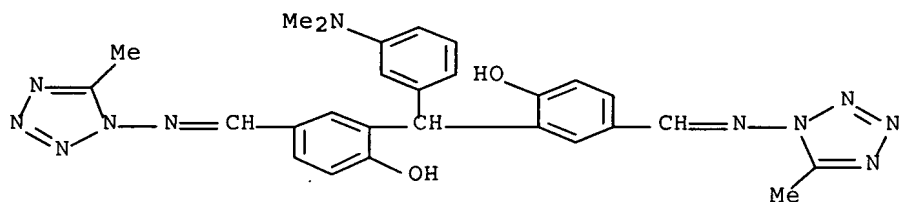
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

```
(preparation of 2,2'-(phenylmethylene)bis[[(methyl-1H-
tetrazolyl)imino]methyl]phenol] compds. for treating or preventing
```

pneumovirus infection and associated diseases)

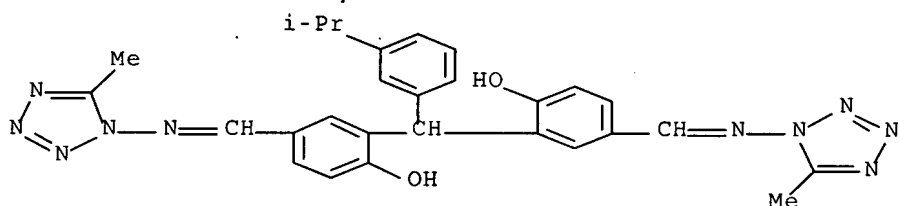
RN 660408-51-5 HCAPLUS

CN Phenol, 2,2'-[[3-(dimethylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



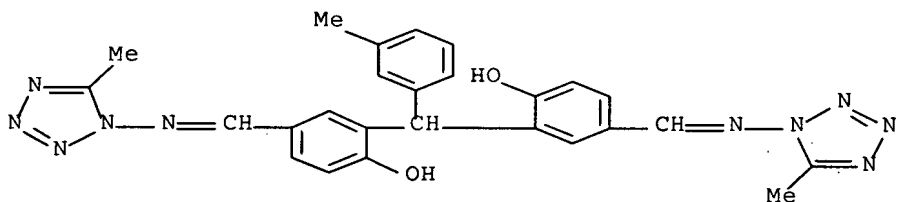
RN 660408-53-7 HCAPLUS

CN Phenol, 2,2'-[[3-(1-methylethyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



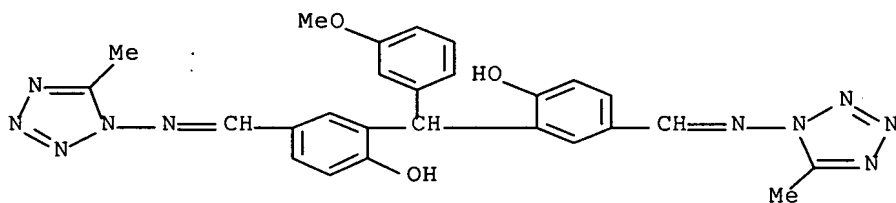
RN 660408-54-8 HCAPLUS

CN Phenol, 2,2'-[[3-methylphenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



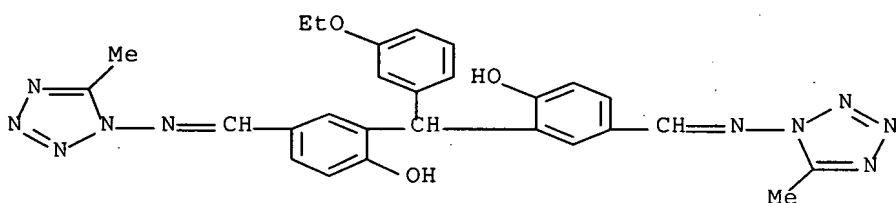
RN 660408-56-0 HCAPLUS

CN Phenol, 2,2'-[[3-methoxyphenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



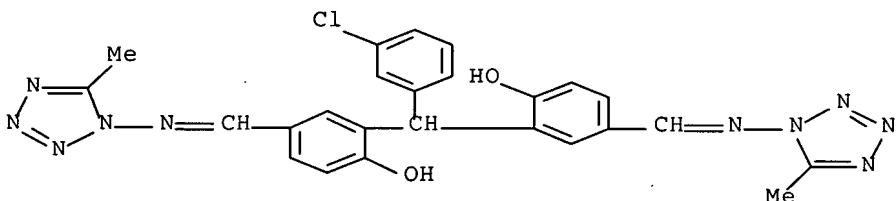
RN 660408-58-2 HCAPLUS

CN Phenol, 2,2'-[(3-ethoxyphenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



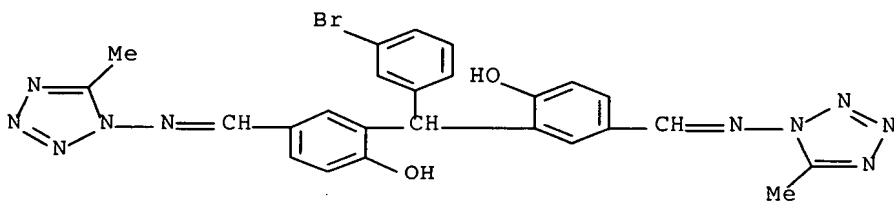
RN 660408-60-6 HCAPLUS

CN Phenol, 2,2'-[(3-chlorophenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



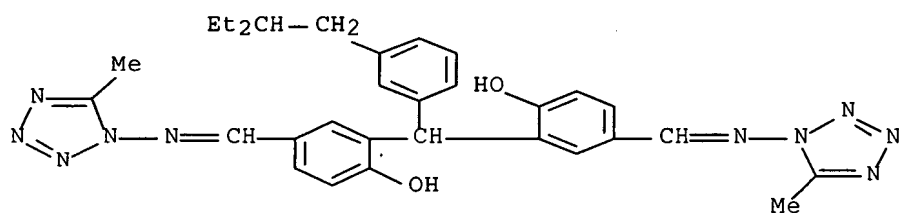
RN 660408-62-8 HCAPLUS

CN Phenol, 2,2'-[(3-bromophenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



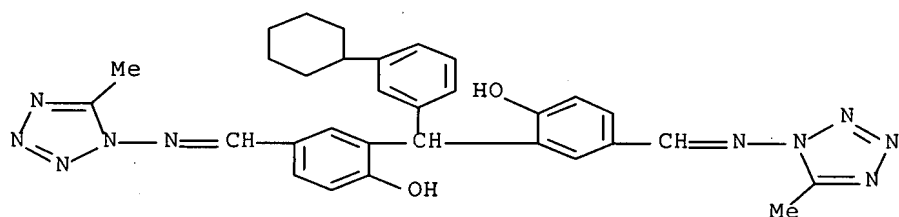
RN 660408-64-0 HCAPLUS

CN Phenol, 2,2'-[[3-(2-ethylbutyl)phenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



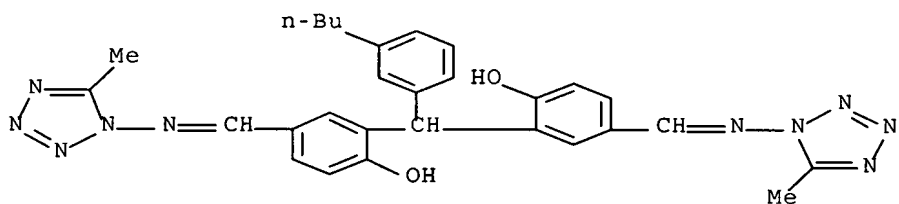
RN 660408-66-2 HCAPLUS

CN Phenol, 2,2'-[[3-(cyclohexylphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



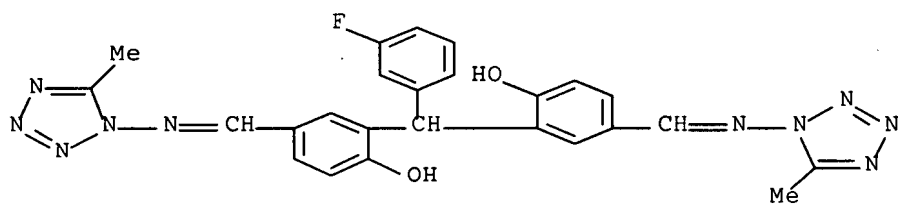
RN 660408-68-4 HCAPLUS

CN Phenol, 2,2'-[[3-(butylphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



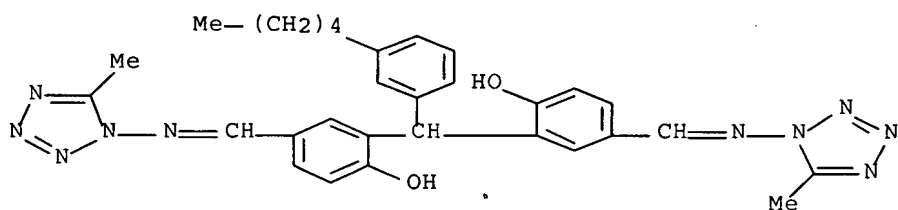
RN 660408-70-8 HCAPLUS

CN Phenol, 2,2'-[[3-(fluorophenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



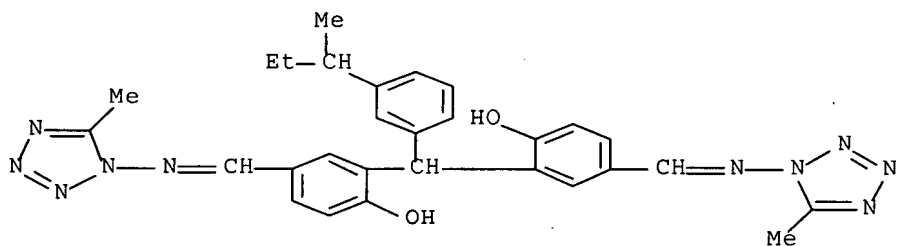
RN 660408-72-0 HCAPLUS

CN Phenol, 2,2'-[(3-pentylphenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



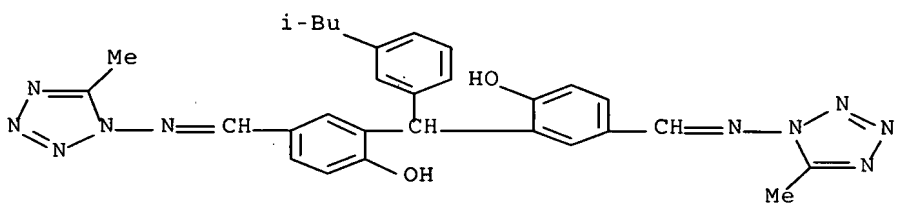
RN 660408-74-2 HCAPLUS

CN Phenol, 2,2'-[[3-(1-methylpropyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



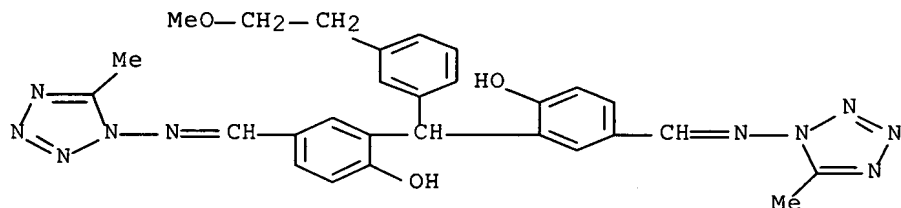
RN 660408-76-4 HCAPLUS

CN Phenol, 2,2'-[[3-(2-methylpropyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



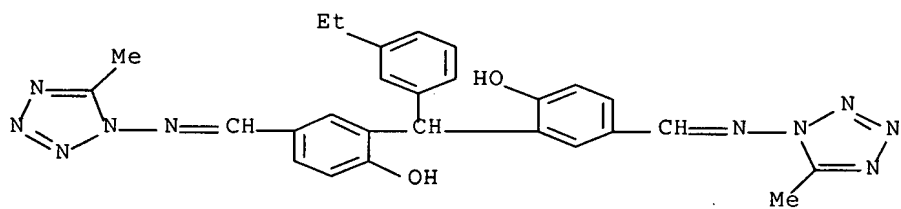
RN 660408-78-6 HCAPLUS

CN Phenol, 2,2'-[[3-(2-methoxyethyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



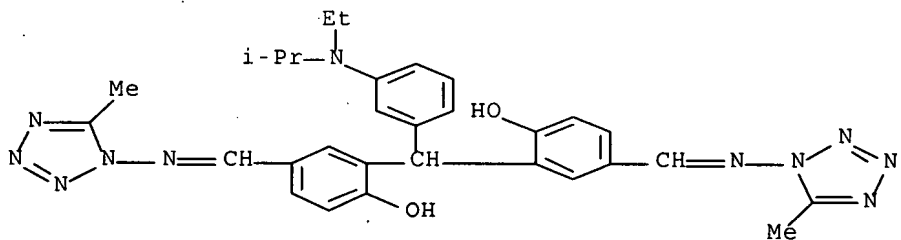
RN 660408-80-0 HCAPLUS

CN Phenol, 2,2'-[[3-(ethylphenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



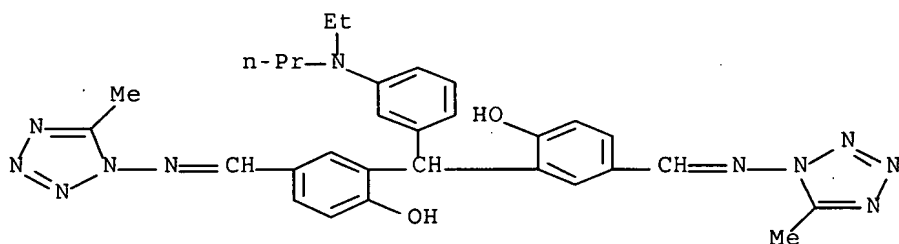
RN 660408-82-2 HCAPLUS

CN Phenol, 2,2'-[[3-[ethyl(1-methylethyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



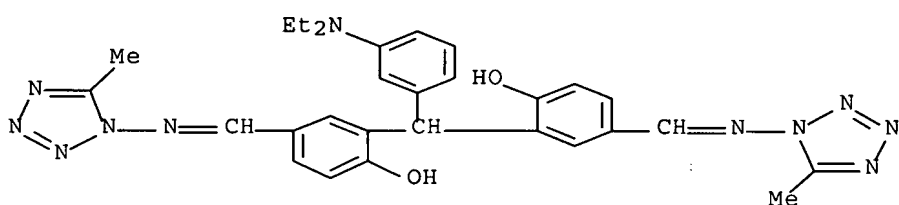
RN 660408-84-4 HCAPLUS

CN Phenol, 2,2'-[[3-(ethylpropylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



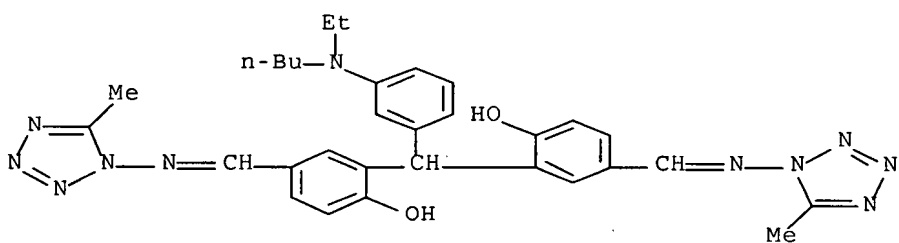
RN 660408-86-6 HCAPLUS

CN Phenol, 2,2'-[[3-(diethylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



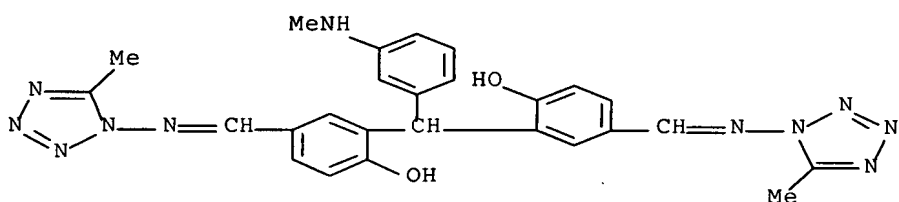
RN 660408-87-7 HCAPLUS

CN Phenol, 2,2'-[[3-(butylethylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



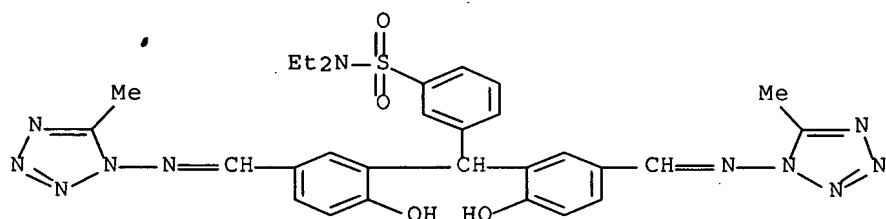
RN 660408-89-9 HCAPLUS

CN Phenol, 2,2'-[[3-(methylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



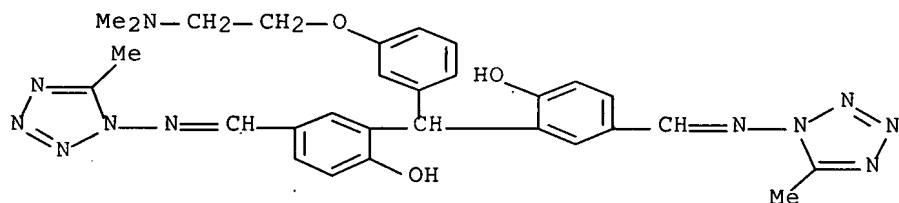
RN 660408-91-3 HCAPLUS

CN Benzenesulfonamide, 3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]-N,N-diethyl- (CA INDEX NAME)



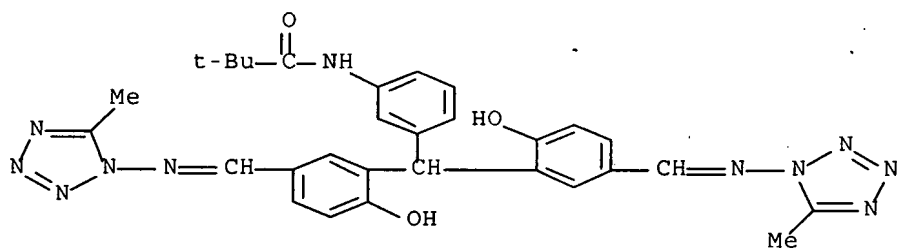
RN 660408-93-5 HCAPLUS

CN Phenol, 2,2'-[[3-[2-(dimethylamino)ethoxy]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



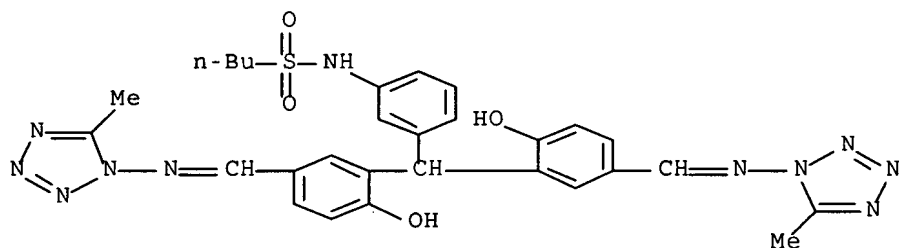
RN 660408-95-7 HCAPLUS

CN Propanamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2,2-dimethyl- (CA INDEX NAME)



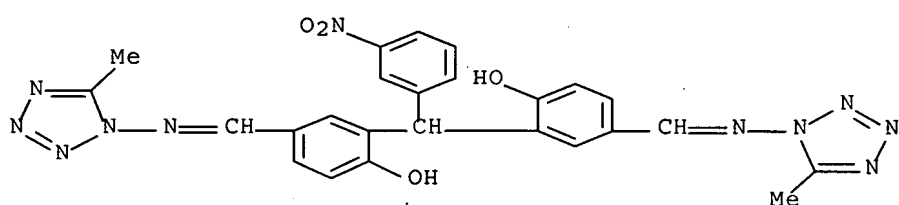
RN 660408-97-9 HCAPLUS

CN 1-Butanesulfonamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]- (CA INDEX NAME)



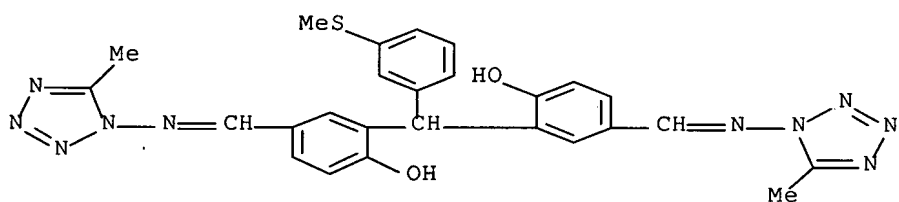
RN 660408-99-1 HCAPLUS

CN Phenol, 2,2'-[[3-(n-butylsulfonylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



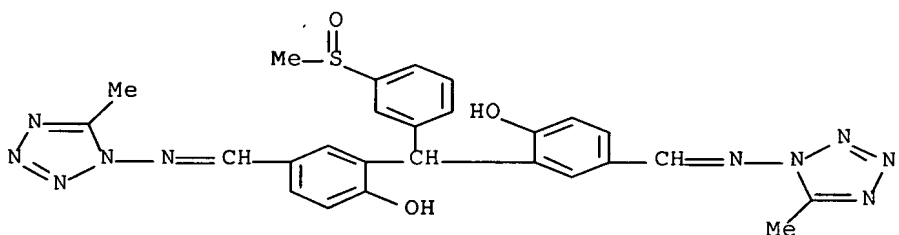
RN 660409-01-8 HCAPLUS

CN Phenol, 2,2'-[[3-(methylthio)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



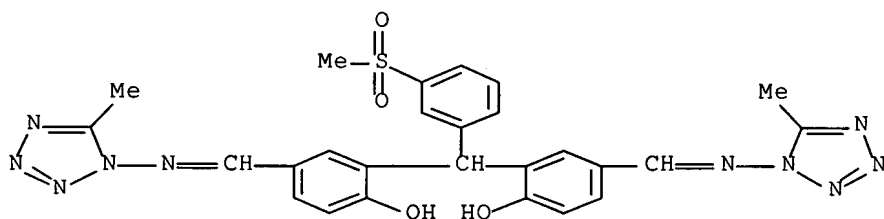
RN 660409-03-0 HCAPLUS

CN Phenol, 2,2'-[[3-(methylsulfinyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



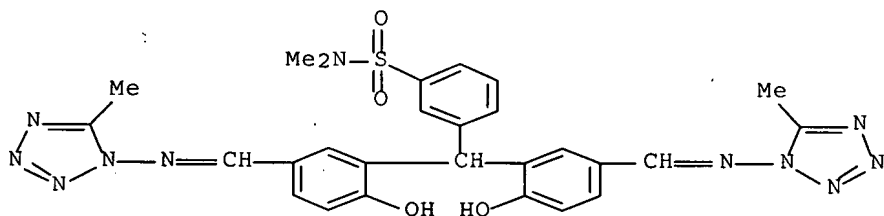
RN 660409-05-2 HCAPLUS

CN Phenol, 2,2'-[[3-(methylsulfonyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



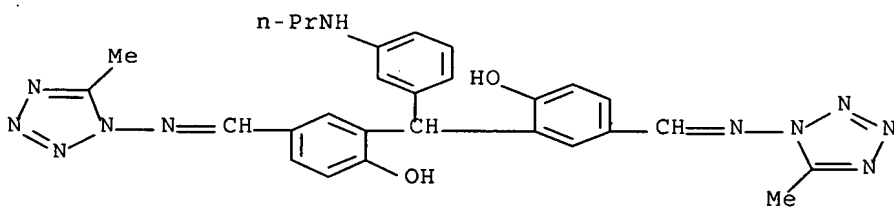
RN 660409-07-4 HCAPLUS

CN Benzenesulfonamide, 3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]-N,N-dimethyl- (CA INDEX NAME)



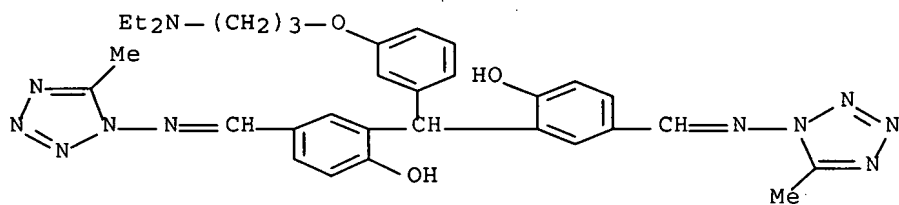
RN 660409-09-6 HCAPLUS

CN Phenol, 2,2'-[[3-(propylamino)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



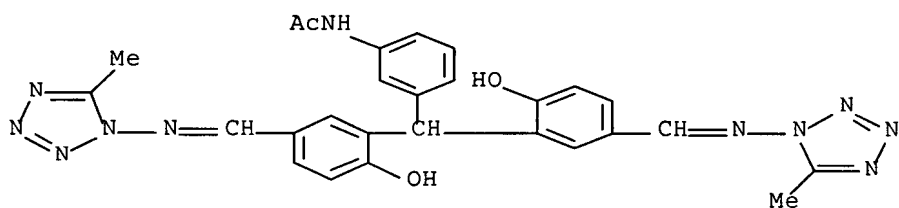
RN 660409-11-0 HCAPLUS

CN Phenol, 2,2'-[[3-[3-(diethylamino)propoxy]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



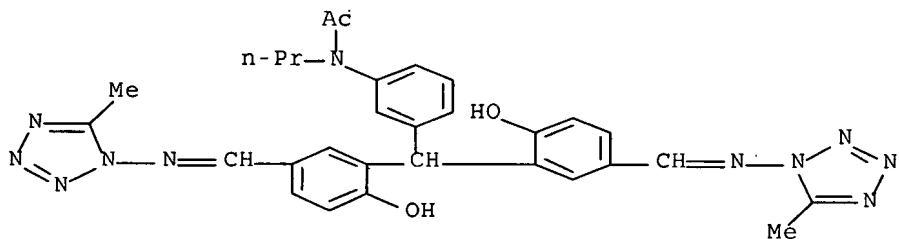
RN 660409-12-1 HCAPLUS

CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]- (CA INDEX NAME)



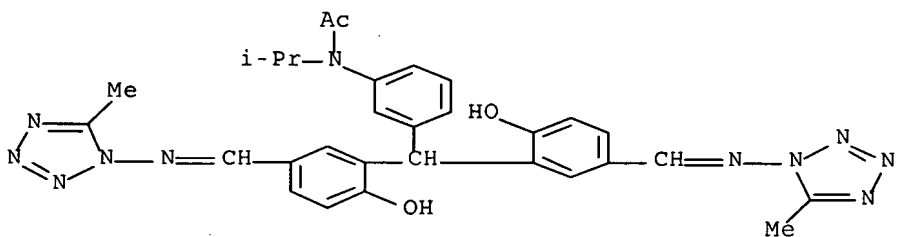
RN 660409-15-4 HCAPLUS

CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-N-propyl- (CA INDEX NAME)

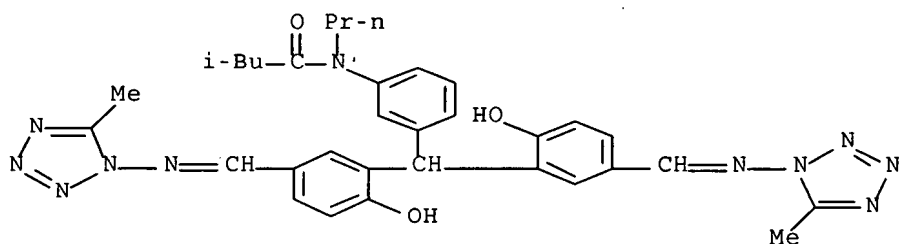


RN 660409-17-6 HCAPLUS

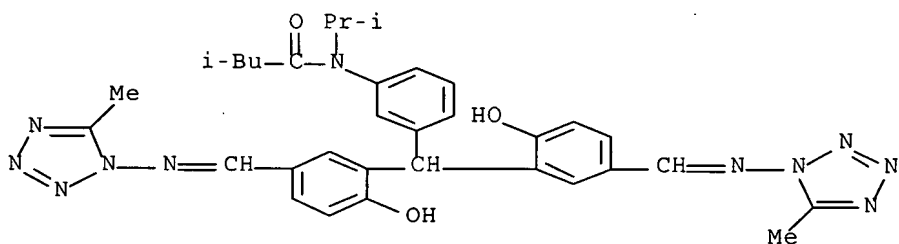
CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-N-(1-methylethyl)- (CA INDEX NAME)



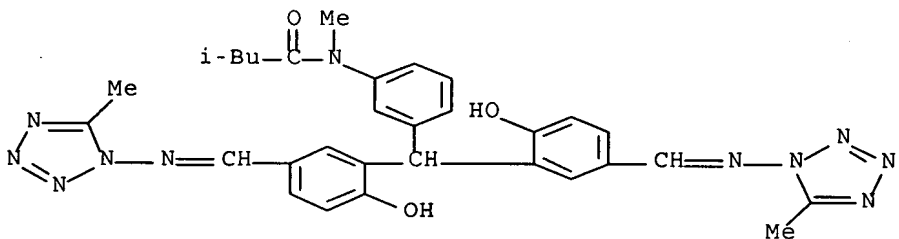
RN 660409-19-8 HCAPLUS
 CN Butanamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]phenyl]methyl]phenyl]-3-methyl-N-propyl- (CA INDEX NAME)



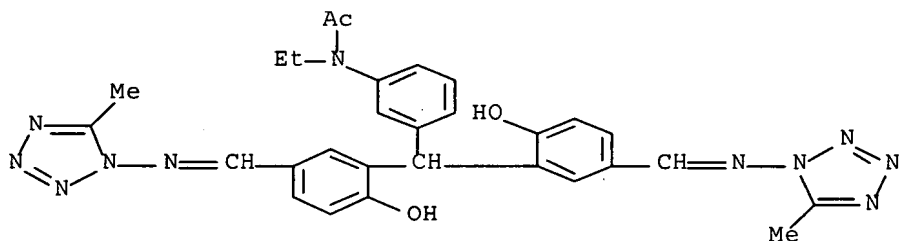
RN 660409-21-2 HCAPLUS
 CN Butanamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]phenyl]methyl]phenyl]-3-methyl-N-(1-methylethyl)- (CA INDEX NAME)



RN 660409-22-3 HCAPLUS
 CN Butanamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]phenyl]methyl]phenyl]-N,3-dimethyl- (CA INDEX NAME)

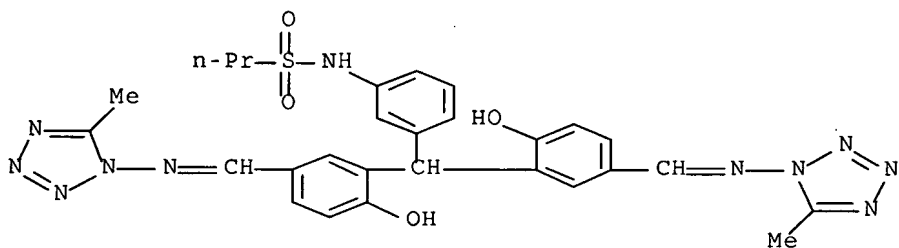


RN 660409-23-4 HCAPLUS
 CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]phenyl]methyl]phenyl]-N-ethyl- (CA INDEX NAME)



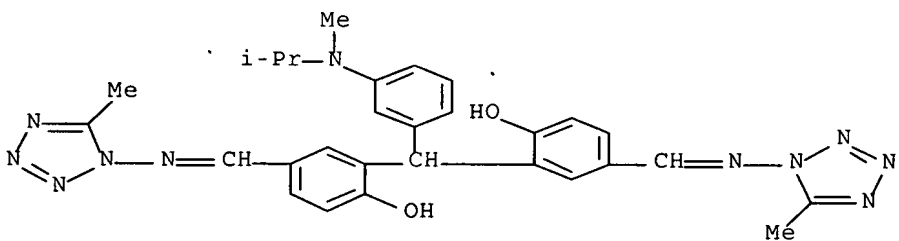
RN 660409-24-5 HCAPLUS

CN 1-Propanesulfonamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]- (CA INDEX NAME)



RN 660409-25-6 HCAPLUS

CN Phenol, 2,2'-[[3-[methyl(1-methylethyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



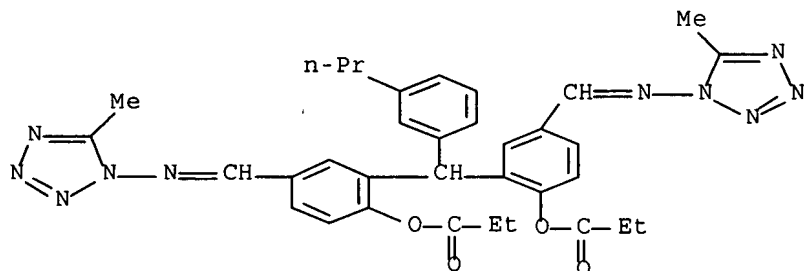
IT 660409-26-7P 660409-27-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prodrug; preparation of 2,2'-(phenylmethylene)bis[[[(methyl-1H-tetrazolyl)imino]methyl]phenol] compds. for treating or preventing pneumovirus infection and associated diseases).

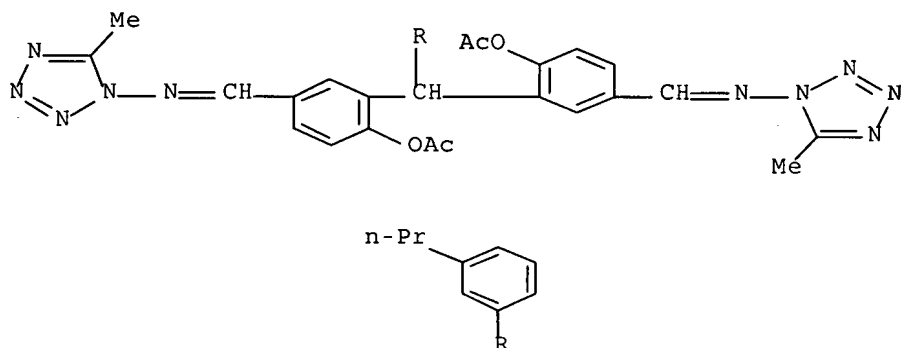
RN 660409-26-7 HCAPLUS

CN Phenol, 2,2'-[[3-propylphenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]-, dipropanoate (ester) (9CI) (CA INDEX NAME)



RN 660409-27-8 HCAPLUS

CN Phenol, 2,2'-[(3-propylphenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]-, diacetate (ester) (9CI) (CA INDEX NAME)



L52 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:142913 HCAPLUS Full-text

DOCUMENT NUMBER: 140:181452

TITLE: Preparation of triaryl bistetrazole derivatives for treating or preventing pneumovirus infection and associated diseases

INVENTOR(S): Nitz, Theodore J.; Gaboury, Janet A.; Burns, Christopher J.; Laquerre, Sylvie; Pevear, Daniel C.; Lessen, Thomas A.; Rys, David J.

PATENT ASSIGNEE(S): Viropharma Incorporated, USA

SOURCE: PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

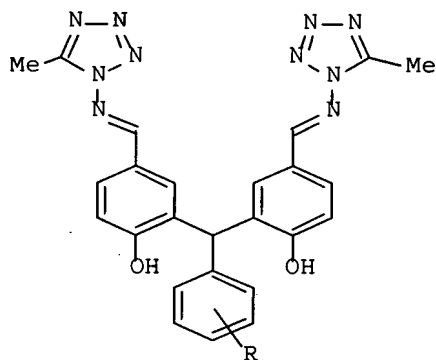
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014316	A2	20040219	WO 2003-US25165	20030811
WO 2004014316	A3	20040617		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2495266 A1 20040219 CA 2003-2495266 20030811
 AU 2003258176 A1 20040225 AU 2003-258176 20030811
 EP 1545513 A2 20050629 EP 2003-785208 20030811
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2005288344 A1 20051229 US 2005-524162 20050617
 PRIORITY APPLN. INFO.: US 2002-402450P P 20020809
 WO 2003-US25165 W 20030811
 OTHER SOURCE(S): MARPAT 140:181452
 ED Entered STN: 22 Feb 2004
 GI



AB The title compound I [R = alkyl, substituted amino, substituted SO₂NH₂, hydroxyalkyl, hydroxyalkoxy, polyhydroxyalkyl, alkoxyalkoxy, polyfluoroalkyl, dialkylaminoalkyl, heterocyclyl, etc.] were prepared for treating or preventing pneumovirus infection and associated diseases. Thus, reaction of 2,2'-[[3-(2,2,2-trifluoroethyl)phenyl]methylene]bis(4-formyl)phenol (preparation given) with 1-amino-5-methyltetrazole yielded compound I (R = CH₂CF₃). The prepared compds. were assayed for the inhibition of the replication of several pneumoviruses with IC₅₀ range from 0.1 nM to 1 μM.

IC ICM A61K

CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 63

IT 658688-35-8P 658688-36-9P 658688-37-0P
 658688-38-1P 658688-39-2P 658688-40-5P
 658688-41-6P 658688-42-7P 658688-43-8P
 658688-44-9P 658688-45-0P 658688-46-1P
 658688-47-2P 658688-48-3P 658688-49-4P
 658688-50-7P 658688-51-8P 658688-52-9P
 658688-53-0P 658688-54-1P 658688-55-2P
 658688-56-3P 658688-57-4P 658688-58-5P
 658688-59-6P 658688-60-9P 658688-61-0P
 658688-62-1P 658688-63-2P 658688-64-3P

658688-65-4P 658688-66-5P 658688-67-6P
 658688-68-7P 658688-69-8P 658688-70-1P
 658688-71-2P 658688-72-3P 658688-73-4P
 658688-74-5P 658688-75-6P 658688-76-7P
 658688-77-8P 658688-78-9P 658688-79-0P
 658688-80-3P 658688-81-4P 658688-82-5P
 658688-83-6P 658688-84-7P 658688-85-8P
 658688-86-9P 658688-87-0P 658688-88-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of triaryl bistetrazole derivs. for treating or preventing
 pneumovirus infection and associated diseases)

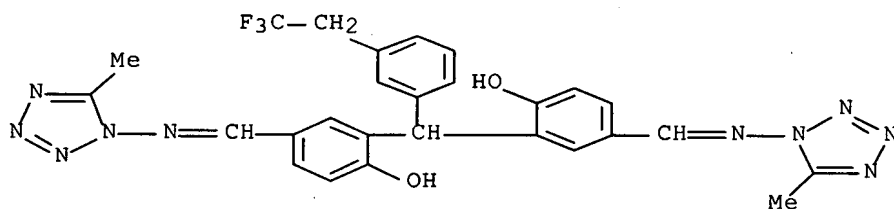
IT 658688-35-8P 658688-36-9P 658688-37-0P
 658688-38-1P 658688-39-2P 658688-40-5P
 658688-41-6P 658688-42-7P 658688-43-8P
 658688-44-9P 658688-45-0P 658688-46-1P
 658688-47-2P 658688-48-3P 658688-49-4P
 658688-50-7P 658688-51-8P 658688-52-9P
 658688-53-0P 658688-54-1P 658688-55-2P
 658688-56-3P 658688-57-4P 658688-58-5P
 658688-59-6P 658688-60-9P 658688-61-0P
 658688-62-1P 658688-63-2P 658688-64-3P
 658688-65-4P 658688-66-5P 658688-67-6P
 658688-68-7P 658688-69-8P 658688-70-1P
 658688-71-2P 658688-72-3P 658688-73-4P
 658688-74-5P 658688-75-6P 658688-76-7P
 658688-77-8P 658688-78-9P 658688-79-0P
 658688-80-3P 658688-81-4P 658688-82-5P
 658688-83-6P 658688-84-7P 658688-85-8P
 658688-86-9P 658688-87-0P 658688-88-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of triaryl bistetrazole derivs. for treating or preventing
 pneumovirus infection and associated diseases)

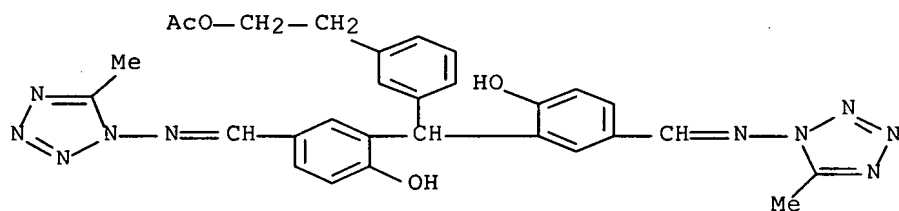
RN 658688-35-8 HCAPLUS

CN Phenol, 2,2'-[[3-(2,2,2-trifluoroethyl)phenyl]methylene]bis[4-[[5-methyl-
 1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



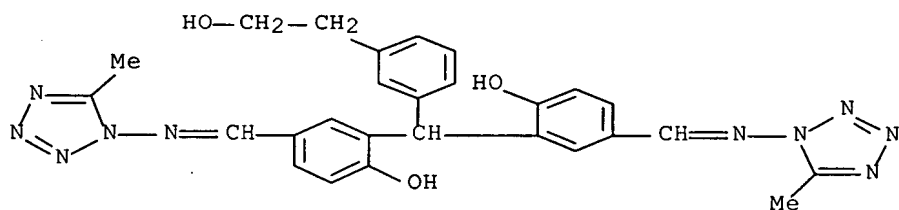
RN 658688-36-9 HCAPLUS

CN Benzeneethanol, 3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-
 yl]imino]methyl]phenyl]methyl]-, α -acetate (9CI) (CA INDEX NAME)



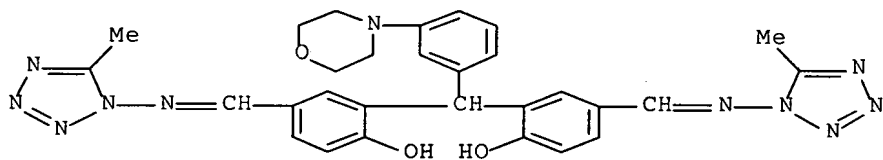
RN 658688-37-0 HCAPLUS

CN Benzeneethanol, 3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]- (CA INDEX NAME)



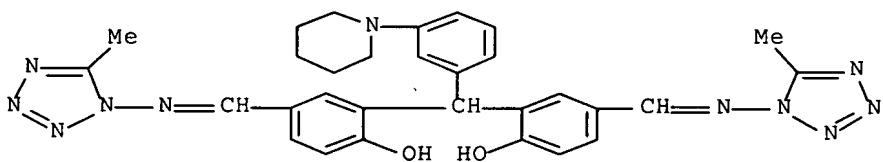
RN 658688-38-1 HCAPLUS

CN Phenol, 2,2'-[[3-(4-morpholinyl)phenyl]methylene]bis[4-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



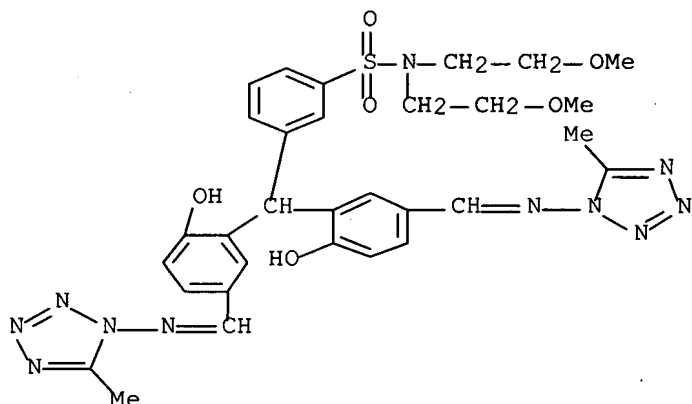
RN 658688-39-2 HCAPLUS

CN Phenol, 2,2'-[[3-(1-piperidiny)phenyl]methylene]bis[4-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



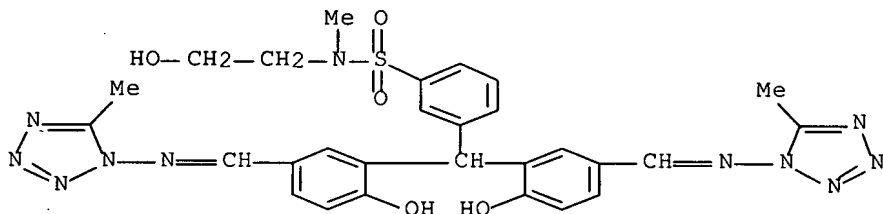
RN 658688-40-5 HCAPLUS

CN Benzenesulfonamide, 3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]-N,N-bis(2-methoxyethyl)- (CA INDEX NAME)



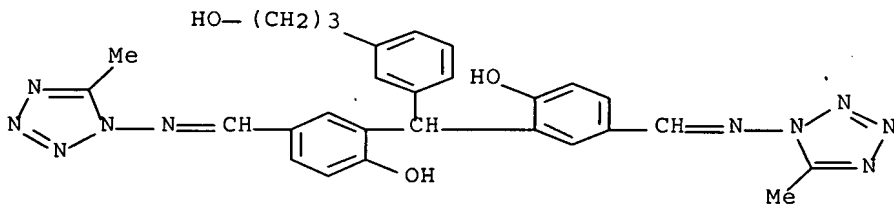
RN 658688-41-6 HCAPLUS

CN Benzenesulfonamide, 3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]-N-(2-hydroxyethyl)-N-methyl- (CA INDEX NAME)



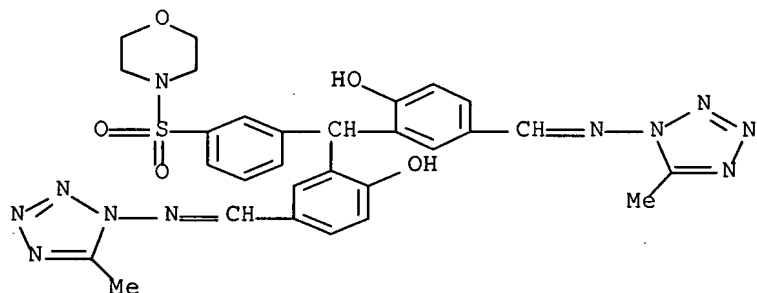
RN 658688-42-7 HCAPLUS

CN Benzenepropanol, 3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]- (CA INDEX NAME)



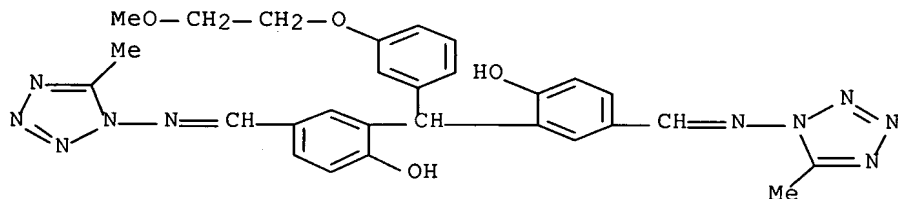
RN 658688-43-8 HCAPLUS

CN Morpholine, 4-[[3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



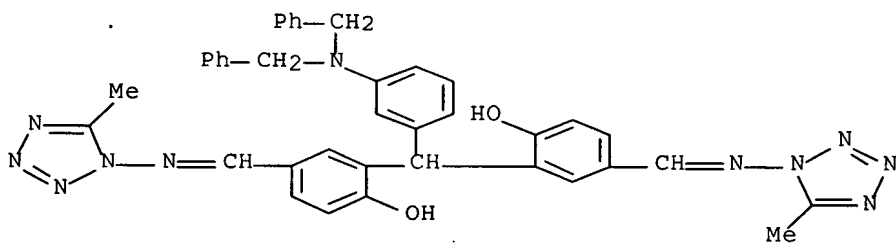
RN 658688-44-9 HCAPLUS

CN Phenol, 2,2'-[[3-(2-methoxyethoxy)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



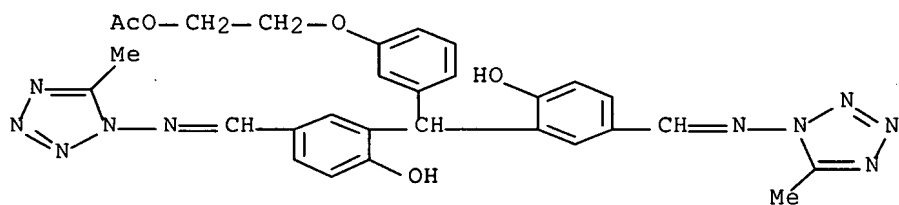
RN 658688-45-0 HCAPLUS

CN Phenol, 2,2'-[[3-[[bis(phenylmethyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



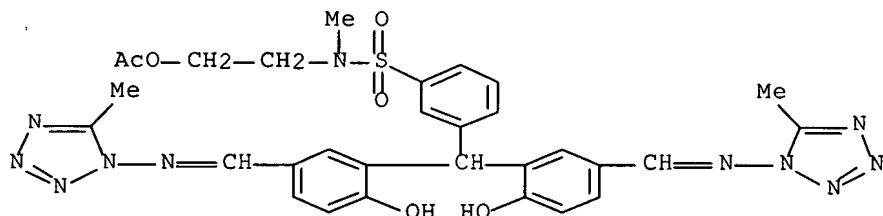
RN 658688-46-1 HCAPLUS

CN Phenol, 2,2'-[[3-[[2-(acetyloxy)ethoxy]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



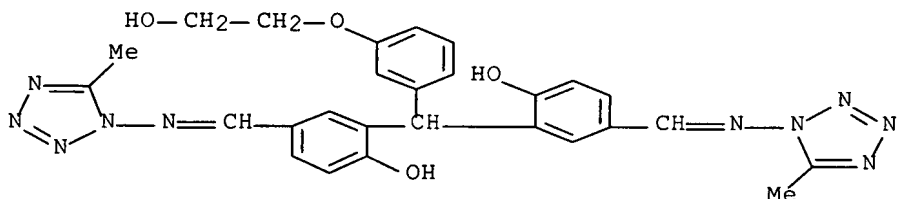
RN 658688-47-2 HCAPLUS

CN Benzenesulfonamide, N-[2-(acetyloxy)ethyl]-3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]-N-methyl- (CA INDEX NAME)



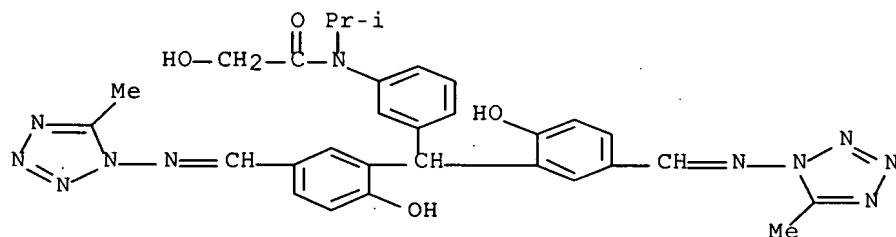
RN 658688-48-3 HCAPLUS

CN Phenol, 2,2'-[[3-(2-hydroxyethoxy)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



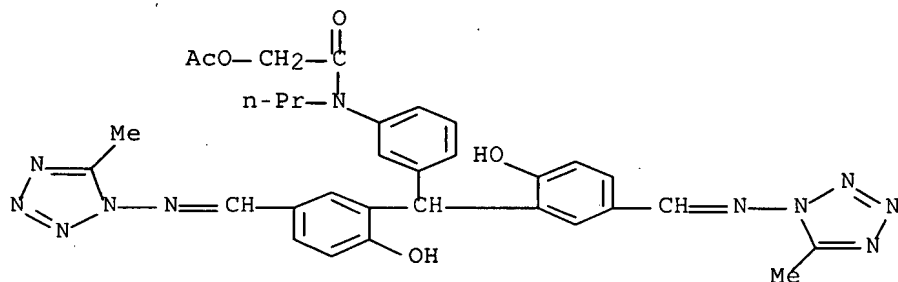
RN 658688-49-4 HCAPLUS

CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2-hydroxy-N-(1-methylethyl)- (CA INDEX NAME)



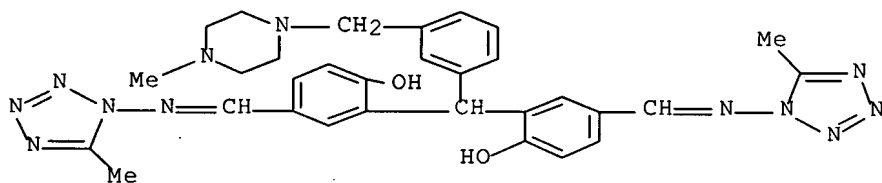
RN 658688-50-7 HCAPLUS

CN Acetamide, 2-(acetyloxy)-N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-N-propyl- (CA INDEX NAME)



RN 658688-51-8 HCAPLUS

CN Phenol, 2,2'-[[3-[(4-methyl-1-piperazinyl)methyl]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



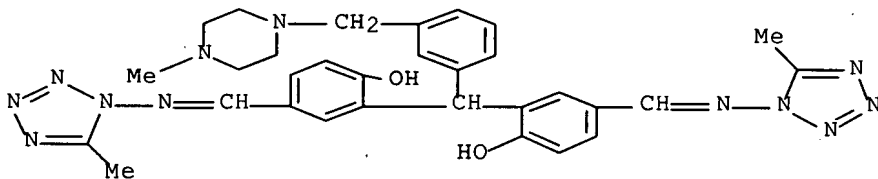
RN 658688-52-9 HCAPLUS

CN Phenol, 2,2'-[[3-[(4-methyl-1-piperazinyl)methyl]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 658688-51-8

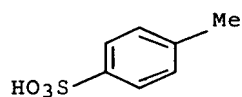
CMF C31 H34 N12 O2



CM 2

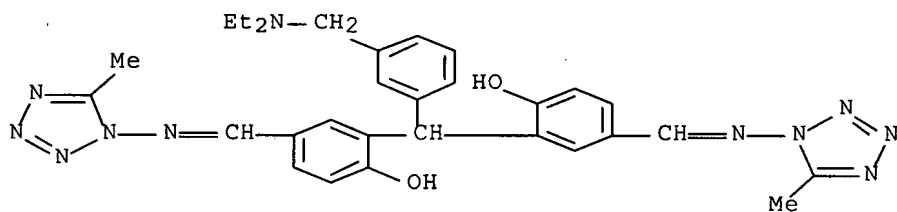
CRN 104-15-4

CMF C7 H8 O3 S



RN 658688-53-0 HCAPLUS

CN Phenol, 2,2'-[[3-[(diethylamino)methyl]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



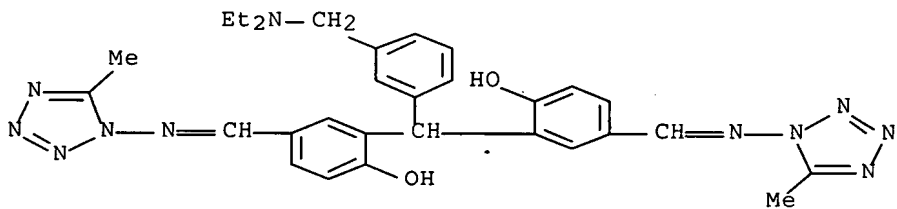
RN 658688-54-1 HCAPLUS

CN Phenol, 2,2'-[[3-[(diethylamino)methyl]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 658688-53-0

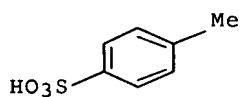
CMF C30 H33 N11 O2



CM 2

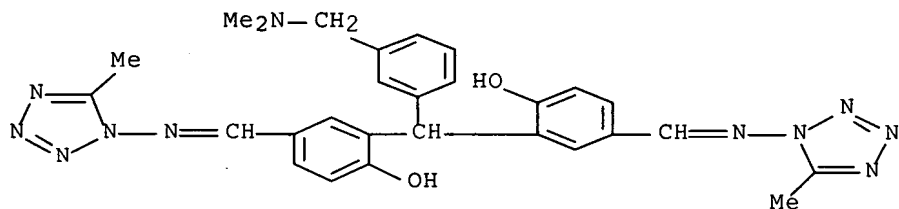
CRN 104-15-4

CMF C7 H8 O3 S



RN 658688-55-2 HCAPLUS

CN Phenol, 2,2'-[[3-[(dimethylamino)methyl]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



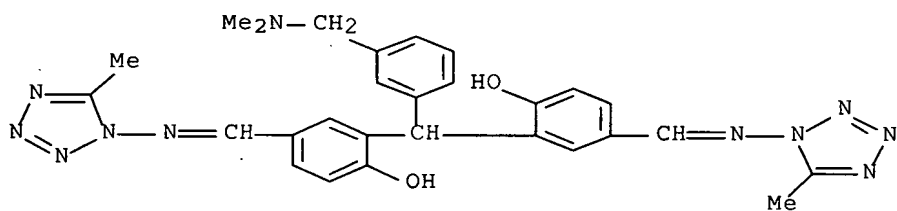
RN 658688-56-3 HCAPLUS

CN Phenol, 2,2'-[[3-[(dimethylamino)methyl]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 658688-55-2

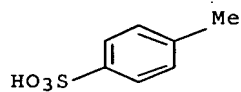
CMF C28 H29 N11 O2



CM 2

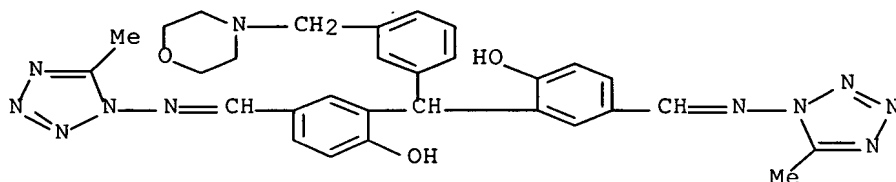
CRN 104-15-4

CMF C7 H8 O3 S



RN 658688-57-4 HCAPLUS

CN Phenol, 2,2'-[[3-(4-morpholinylmethyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)



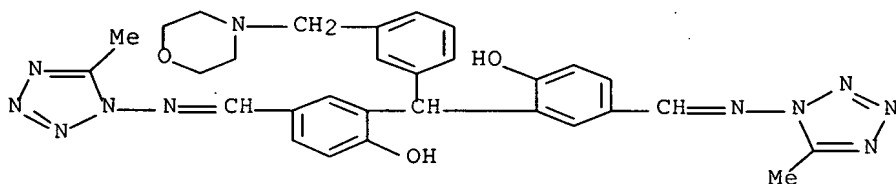
RN 658688-58-5 HCAPLUS

CN Phenol, 2,2'-[[3-(4-morpholinylmethyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 658688-57-4

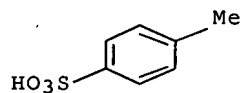
CMF C30 H31 N11 O3



CM 2

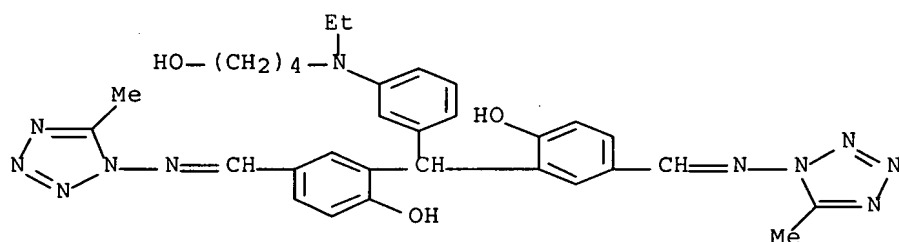
CRN 104-15-4

CMF C7 H8 O3 S



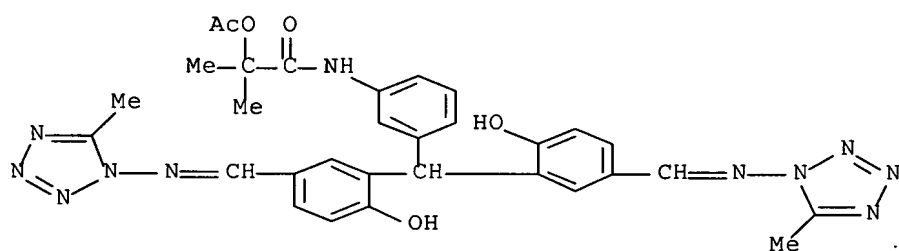
RN 658688-59-6 HCAPLUS

CN Phenol, 2,2'-[[3-[ethyl(4-hydroxybutyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



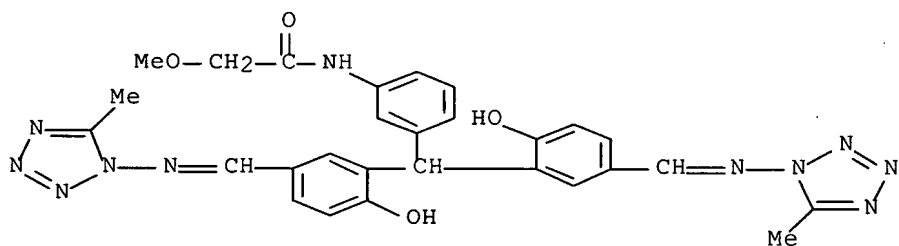
RN 658688-60-9 HCAPLUS

CN Propanamide, 2-(acetyloxy)-N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2-methyl- (CA INDEX NAME)



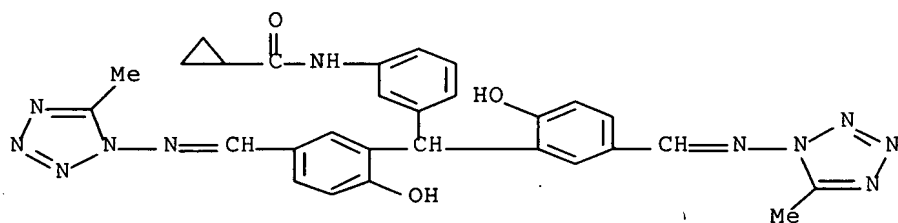
RN 658688-61-0 HCAPLUS

CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2-methoxy- (CA INDEX NAME)



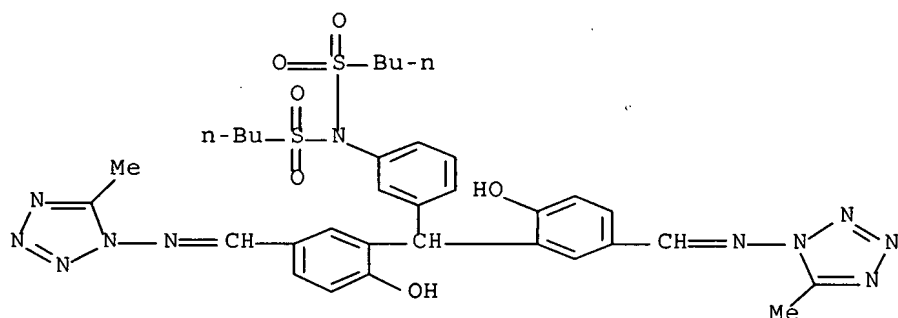
RN 658688-62-1 HCAPLUS

CN Cyclopropanecarboxamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]- (CA INDEX NAME)



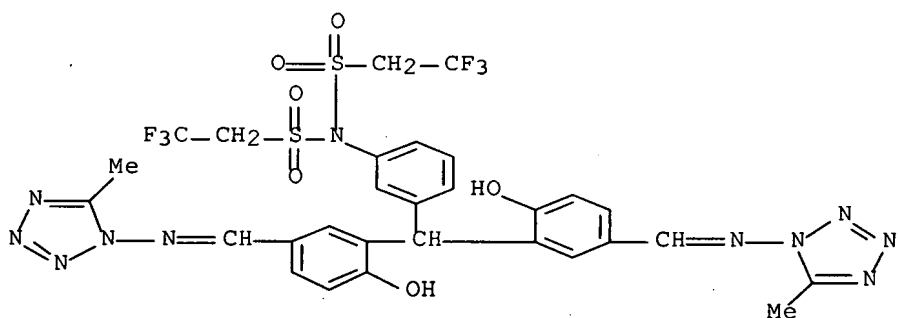
RN 658688-63-2 HCAPLUS

CN 1-Butanesulfonamide, N-[3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-N-(butylsulfonyl)- (CA INDEX NAME)



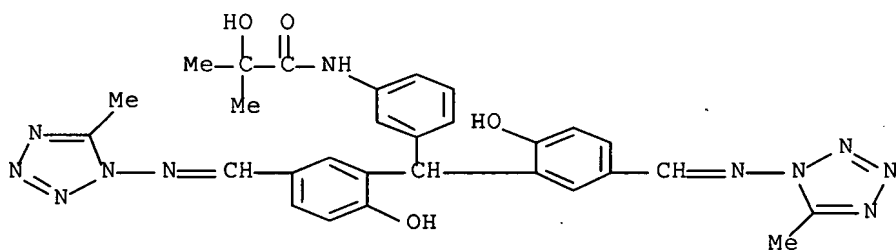
RN 658688-64-3 HCAPLUS

CN Ethanesulfonamide, N-[3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2,2,2-trifluoro-N-[(2,2,2-trifluoroethyl)sulfonyl]- (CA INDEX NAME)



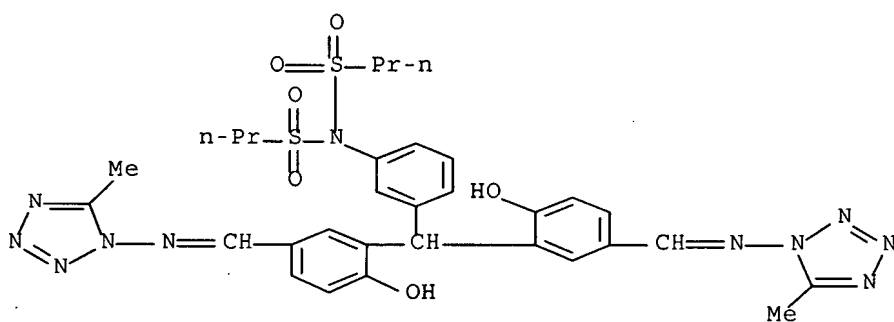
RN 658688-65-4 HCAPLUS

CN Propanamide, N-[3-[bis[2-hydroxy-5-[[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2-hydroxy-2-methyl- (CA INDEX NAME)



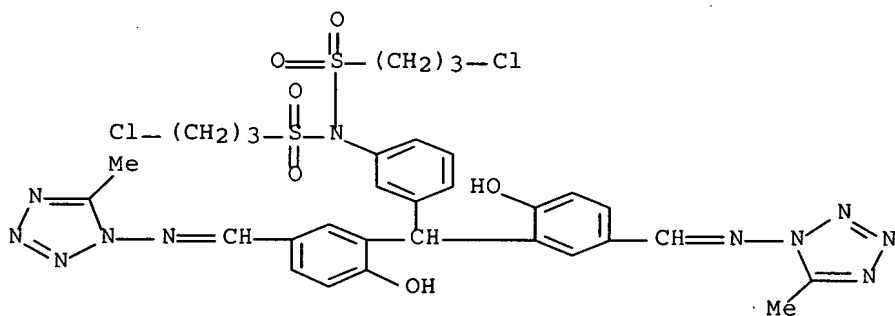
RN 658688-66-5 HCAPLUS

CN 1-Propanesulfonamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-N-(propylsulfonyl)- (CA INDEX NAME)



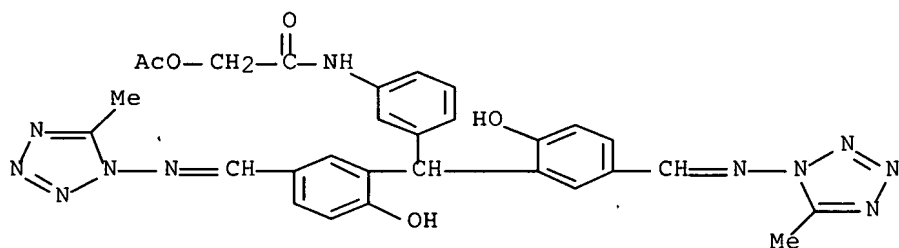
RN 658688-67-6 HCAPLUS

CN 1-Propanesulfonamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-3-chloro-N-[(3-chloropropyl)sulfonyl]- (CA INDEX NAME)



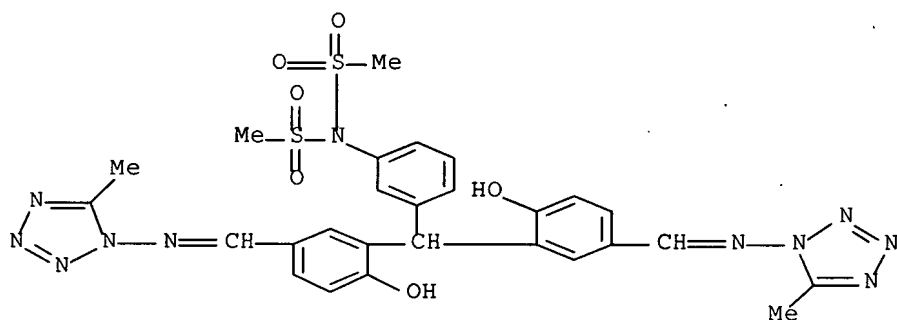
RN 658688-68-7 HCAPLUS

CN Acetamide, 2-(acetyloxy)-N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]- (CA INDEX NAME)



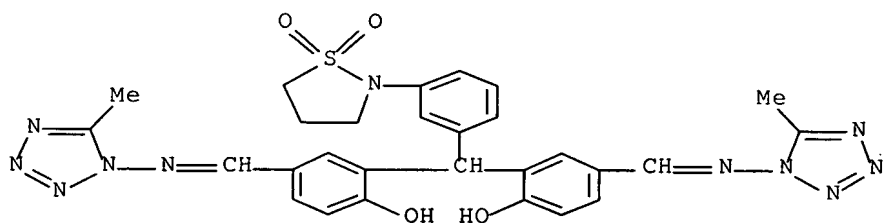
RN 658688-69-8 HCAPLUS

CN Methanesulfonamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-N-(methylsulfonyl)- (CA INDEX NAME)



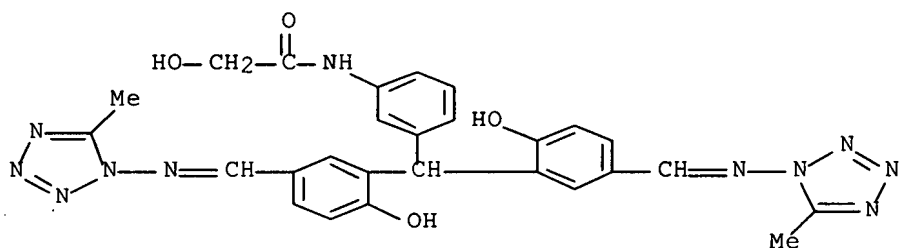
RN 658688-70-1 HCAPLUS

CN Phenol, 2,2'-[[3-(1,1-dioxido-2-isothiazolidinyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (CA INDEX NAME)



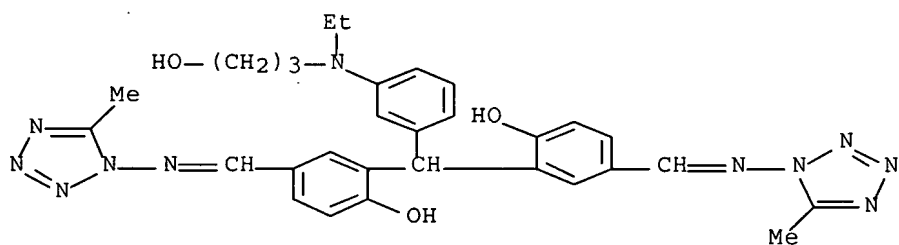
RN 658688-71-2 HCAPLUS

CN Acetamide, N-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]-2-hydroxy- (CA INDEX NAME)



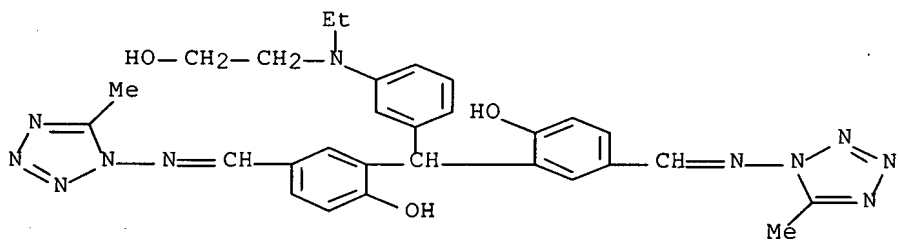
RN 658688-72-3 HCAPLUS

CN Phenol, 2,2'-[[3-[ethyl(3-hydroxypropyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



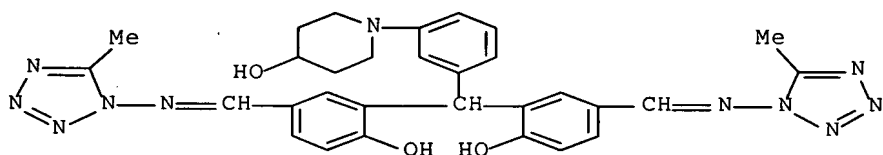
RN 658688-73-4 HCAPLUS

CN Phenol, 2,2'-[[3-[ethyl(2-hydroxyethyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



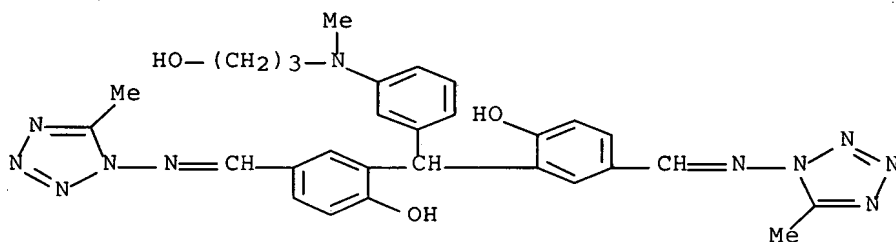
RN 658688-74-5 HCAPLUS

CN 4-Piperidinol, 1-[3-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenyl]- (CA INDEX NAME)



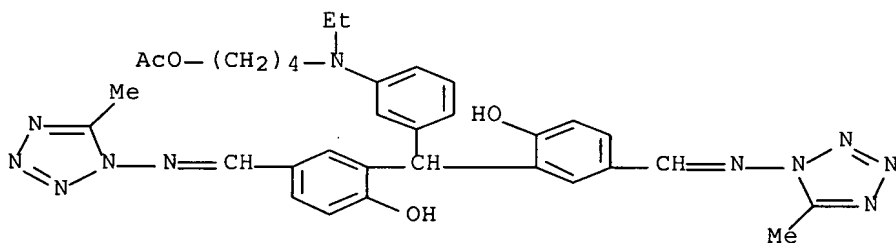
RN 658688-75-6 HCAPLUS

CN Phenol, 2,2'-[[3-[(3-hydroxypropyl)methylamino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



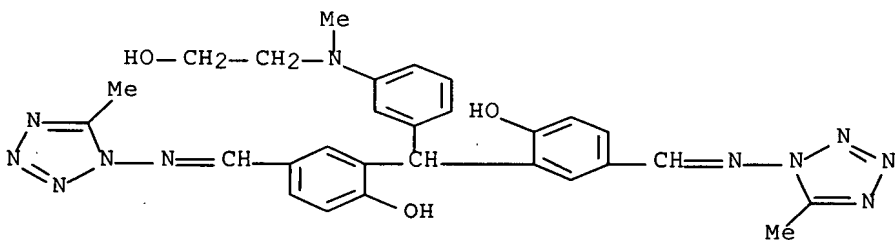
RN 658688-76-7 HCAPLUS

CN Phenol, 2,2'-[[3-[[4-(acetyloxy)butyl]ethylamino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



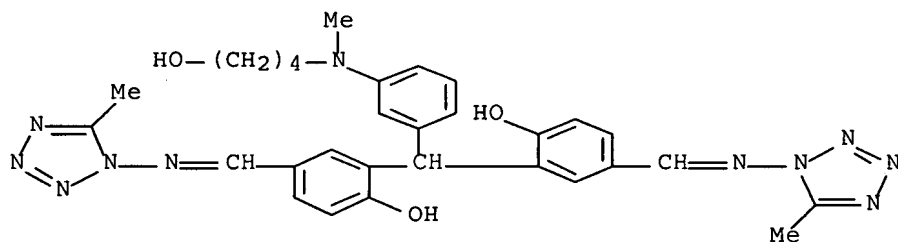
RN 658688-77-8 HCAPLUS

CN Phenol, 2,2'-[[3-[(2-hydroxyethyl)methylamino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



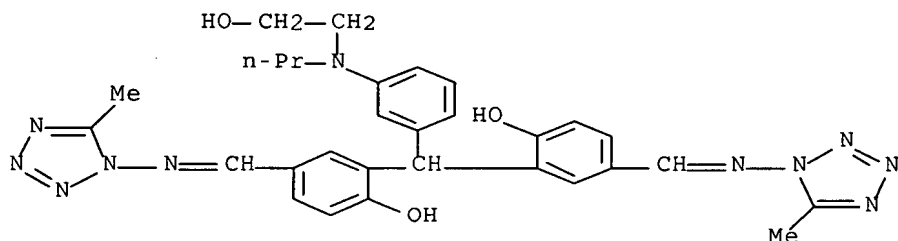
RN 658688-78-9 HCAPLUS

CN Phenol, 2,2'-[[3-[(4-hydroxybutyl)methylamino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



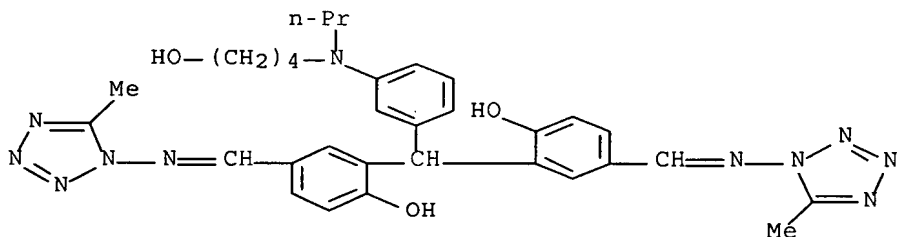
RN 658688-79-0 HCAPLUS

CN Phenol, 2,2'-[[3-[(2-hydroxyethyl)propylamino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



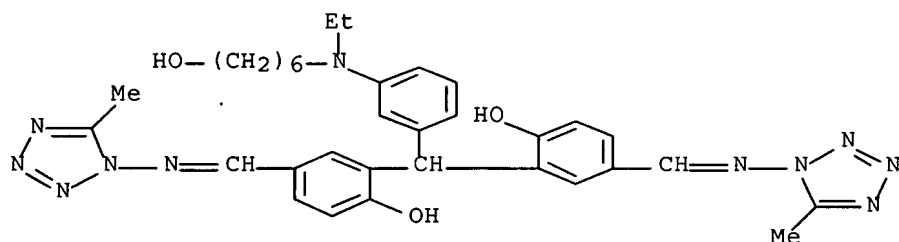
RN 658688-80-3 HCAPLUS

CN Phenol, 2,2'-[[3-[(4-hydroxybutyl)propylamino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



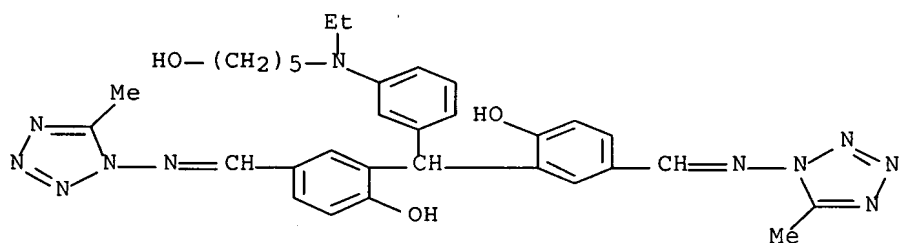
RN 658688-81-4 HCAPLUS

CN Phenol, 2,2'-[[3-[ethyl(6-hydroxyhexyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



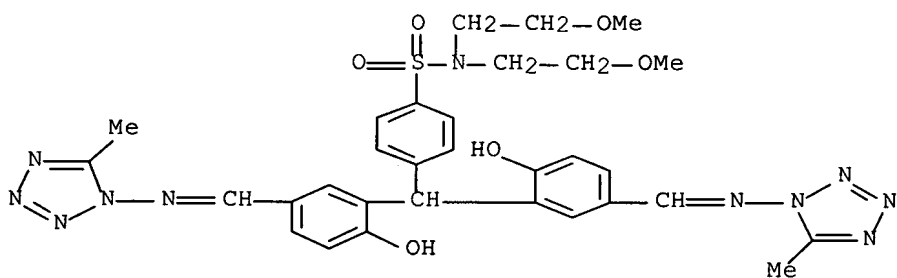
RN 658688-82-5 HCAPLUS

CN Phenol, 2,2'-[[3-[ethyl(5-hydroxypentyl)amino]phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



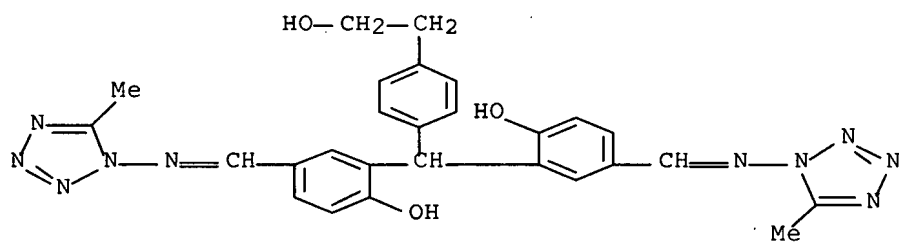
RN 658688-83-6 HCAPLUS

CN Benzenesulfonamide, 4-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]-N,N-bis(2-methoxyethyl)- (CA INDEX NAME)



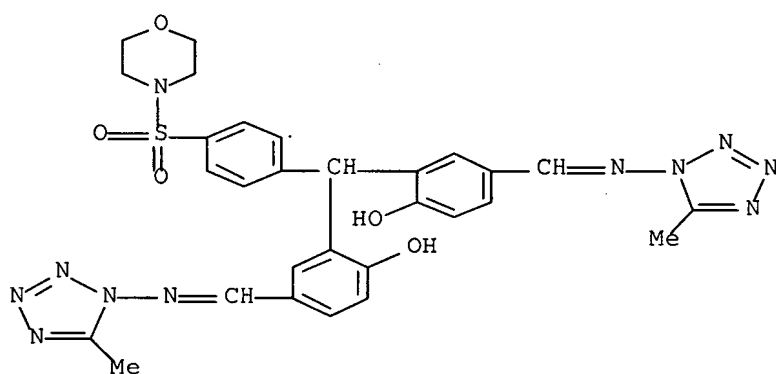
RN 658688-84-7 HCAPLUS

CN Benzeneethanol, 4-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]- (CA INDEX NAME)



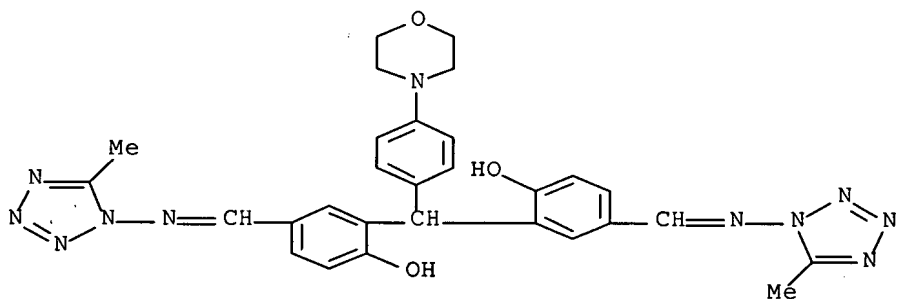
RN 658688-85-8 HCAPLUS

CN Morpholine, 4-[[4-[bis[2-hydroxy-5-[(5-methyl-1H-tetrazol-1-yl)imino]methyl]phenyl]methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



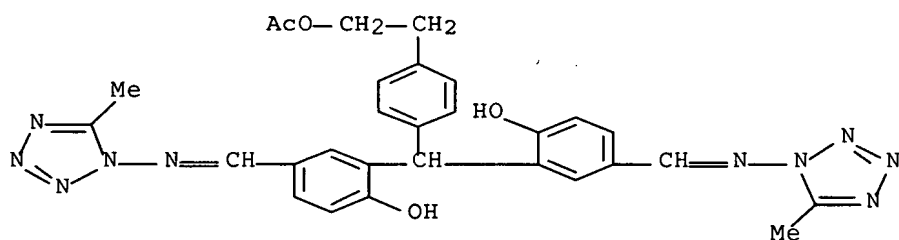
RN 658688-86-9 HCAPLUS

CN Phenol, 2,2'-[[4-(4-morpholinyl)phenyl]methylene]bis[4-[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (CA INDEX NAME)

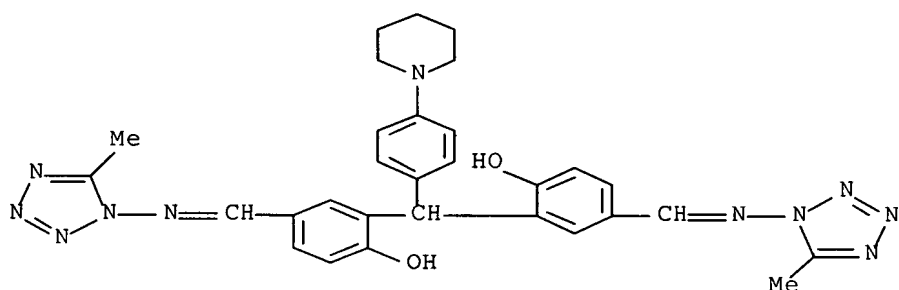


RN 658688-87-0 HCAPLUS

CN Benzeneethanol, 4-[bis[2-hydroxy-5-[(5-methyl-1H-tetrazol-1-yl)imino]methyl]phenyl]methyl]-, α -acetate (9CI) (CA INDEX NAME)



RN 658688-88-1 HCAPLUS
 CN Phenol, 2,2'-[[4-(1-piperidinyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl] - (CA INDEX NAME)



L52 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:376893 HCAPLUS Full-text
 DOCUMENT NUMBER: 138:379184
 TITLE: Method for identifying or screening anti-viral agents against respiratory syncytial virus (RSV) using a three-dimensional model of the RSV-F protein
 INVENTOR(S): Morton, Craig James; Parker, Michael William; Ryan, Jane
 PATENT ASSIGNEE(S): Biota Holdings Ltd., Australia
 SOURCE: PCT Int. Appl., 224 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003040178	A1	20030515	WO 2002-AU1522	20021108
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

AU 2002340630 A1 20030519 AU 2002-340630 20021108
US 2005221285 A1 20051006 US 2004-492187 20040409

PRIORITY APPLN. INFO.:

AU 2001-8784 A 20011109
WO 2002-AU1522 W 20021108

ED Entered STN: 16 May 2003

AB The invention relates to anti-viral agents which may be effective for treating, for example, respiratory infections by Respiratory Syncytial Virus (RSV). A three-dimensional structure model of the RSV-F protein has been generated and described which can be used to identify, screen, and/or develop anti-viral agents, including RSV neutralizing antibodies. The three-dimensional structure model comprises, at least, the three-dimensional structure of a anti-viral target site comprising all or part of each of the following amino acids of RSV-F protein: Tyr33, Cys37, Ser38, Ala39, Val40, Ser41, Lys42, Gly43, Leu48, Arg49, Thr50, Lys315, Leu316, His317, Thr318, Ser319, Pro320, Leu321, Cys322, Thr323, Ser330, Asn331, Ile332, Cys333, Leu334, Thr335, Arg336, 20 Thr337, Asp338, Arg339, Phe352, Pro353, Gln354, Ala355, Glu356, Thr357, Cys358, Phe366, Cys367, Asp368, Thr369, Met370, Asn371, Ser372, Leu373, Lys394, Ile395, Met396, Thr397, Ser398, Lys399, Thr400, Asp401, Val402, Ser403, Ser404, Ser405, Val406, Ile407, Thr408, Ser409, Leu410, Gly411, Ala412, Ile413, Val414, Ser415, Lys419, Lys421 and Asp440. The structure model may also be used to develop RSV-binding antibodies useful for diagnostic assays.

IC ICM C07K014-095

ICS G06F017-50; A61K039-125; A61K038-16; A61P031-16

CC 1-1 (Pharmacology)

Section cross-reference(s): 3, 10, 15

IT 5823-60-9 235106-57-7 317846-22-3

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study); USES (Uses)

(RSV-F inhibitor; method for identifying or screening anti-viral agents against respiratory syncytial virus (RSV) using three-dimensional model of RSV-F protein)

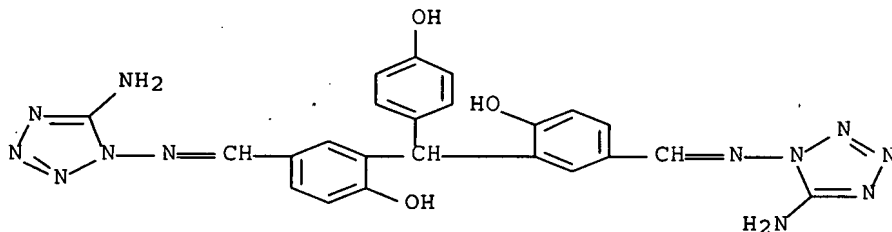
IT 235106-57-7

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study); USES (Uses)

(RSV-F inhibitor; method for identifying or screening anti-viral agents against respiratory syncytial virus (RSV) using three-dimensional model of RSV-F protein)

RN 235106-57-7 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-amino-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2003:318769 HCAPLUS Full-text

DOCUMENT NUMBER: 139:173233

TITLE: Inhibition of respiratory syncytial virus fusion by the small molecule VP-14637 via specific interactions with F protein

AUTHOR(S): Douglas, Janet L.; Panis, Marites L.; Ho, Edmund; Lin, Kuei-Ying; Krawczyk, Steve H.; Grant, Deborah M.; Cai, Ruby; Swaminathan, Swami; Cihlar, Tomas

CORPORATE SOURCE: Gilead, Foster City, CA, 94404, USA

SOURCE: Journal of Virology (2003), 77(9), 5054-5064

CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 25 Apr 2003

AB Human respiratory syncytial virus (RSV) is a major cause of respiratory tract infections worldwide. Several novel small-mol. inhibitors of RSV have been identified, but they are still in preclin. or early clin. evaluation. One such inhibitor is a recently discovered triphenol-based mol., VP-14637 (ViroPharma). Initial expts. suggested that VP-14637 acted early and might be an RSV fusion inhibitor. Here we present studies demonstrating that VP-14637 does not block RSV adsorption but inhibits RSV-induced cell-cell fusion and binds specifically to RSV-infected cells with an affinity corresponding to its inhibitory potency. VP-14637 is capable of specifically interacting with the RSV fusion protein expressed by a T7 vaccinia virus system. RSV variants resistant to VP-14637 were selected; they had mutations localized to two distinct regions of the RSV F protein, heptad repeat 2 (HR2) and the intervening domain between heptad repeat 1 (HR1) and HR2. No mutations arose in HR1, suggesting a mechanism other than direct disruption of the heptad repeat interaction. The F proteins containing the resistance mutations exhibited greatly reduced binding of VP-14637. Despite segregating with the membrane fraction following incubation with intact RSV-infected cells, the compound did not bind to membranes isolated from RSV-infected cells. In addition, binding of VP-14637 was substantially compromised at temps. of ≤ 22 . Therefore, we propose that VP-14637 inhibits RSV through a novel mechanism involving an interaction between the compound and a transient conformation of the RSV F protein.

CC 1-5 (Pharmacology)

IT 235106-62-4, VP 14637

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of respiratory syncytial virus fusion by the small mol. VP-14637 via specific interactions with F protein)

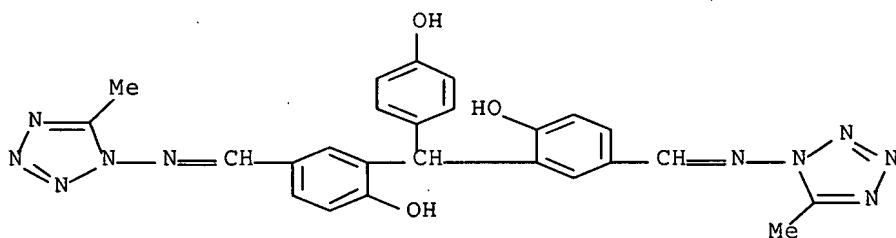
IT 235106-62-4, VP 14637

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of respiratory syncytial virus fusion by the small mol. VP-14637 via specific interactions with F protein)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:495542 HCAPLUS Full-text

DOCUMENT NUMBER: 140:56326

TITLE: Structural characterization of respiratory syncytial virus fusion inhibitor escape mutants: homology model of the F protein and a syncytium formation assay

AUTHOR(S): Morton, Craig J.; Cameron, Rachel; Lawrence, Lynne J.; Lin, Bo; Lowe, Melinda; Luttick, Angela; Mason, Anthony; McKimm-Breschkin, Jenny; Parker, Michael W.; Ryan, Jane; Smout, Michael; Sullivan, Jayne; Tucker, Simon P.; Young, Paul R.

CORPORATE SOURCE: Biota Holdings Limited, Victoria, 3004, Australia

SOURCE: Virology (2003), 311(2), 275-288

CODEN: VIRLAX; ISSN: 0042-6822

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 30 Jun 2003

AB Respiratory syncytial virus (RSV) is a ubiquitous human pathogen and the leading cause of lower respiratory tract infections in infants. Infection of cells and subsequent formation of syncytia occur through membrane fusion mediated by the RSV fusion protein (RSV-F). A novel in vitro assay of recombinant RSV-F function has been devised and used to characterize a number of escape mutants for three known inhibitors of RSV-F that have been isolated. Homol. modeling of the RSV-F structure has been carried out on the basis of a chimera derived from the crystal structures of the RSV-F core and a fragment from the orthologous fusion protein from Newcastle disease virus (NDV). The structure correlates well with the appearance of RSV-F in electron micrographs, and the residues identified as contributing to specific binding sites for several monoclonal antibodies are arranged in appropriate solvent-accessible clusters. The positions of the characterized resistance mutants in the model structure identify two promising regions for the design of fusion inhibitors.

CC 10-6 (Microbial, Algal, and Fungal Biochemistry)

Section cross-reference(s): 6

IT 197365-88-1, CL-387626 235106-62-4, VP14637 317846-22-3, R 170591

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);

THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(homol. model of F protein of respiratory syncytial virus fusion inhibitor escape mutants and a syncytium formation assay)

IT 235106-62-4, VP14637

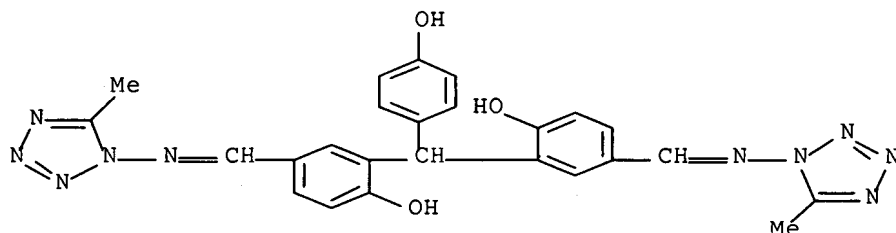
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);

THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(homol. model of F protein of respiratory syncytial virus fusion inhibitor escape mutants and a syncytium formation assay)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:13479 HCAPLUS Full-text

DOCUMENT NUMBER: 135:70403

TITLE: VP-14637 ViroPharma

AUTHOR(S): McKimm-Breschkin, Jennifer

CORPORATE SOURCE: Biomolecular Research Institute, Parkville, VIC 3052, Australia

SOURCE: Current Opinion in Investigational Drugs (PharmaPress Ltd.) (2000), 1(4), 425-427
CODEN: COIDAZ

PUBLISHER: PharmaPress Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 08 Jan 2001

AB A review, with 15 refs. VP-14637 is the lead compound in a series of low mol. weight viral replication inhibitors which are under preclin. investigation by ViroPharma for the potential treatment of RSV infection. Phase 1 trials designed to evaluate the safety and pharmacokinetic profile of VP-14637 in healthy human volunteers have begun. VP-14637 is most active against pneumoviruses and the available data suggest that it is an inhibitor of RSV viral fusion activity.

CC 1-0 (Pharmacology)

IT 235106-62-4, VP 14637

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(VP-14637 for treatment of respiratory syncytial virus infection in humans)

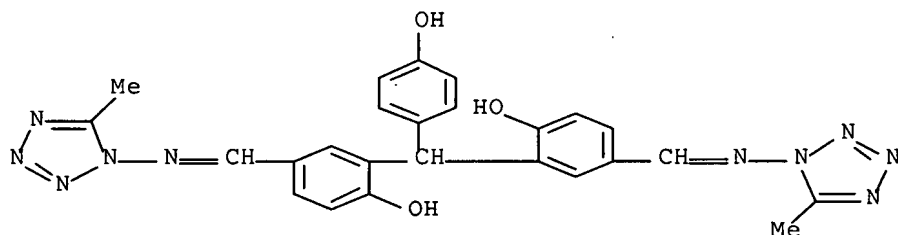
IT 235106-62-4, VP 14637

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(VP-14637 for treatment of respiratory syncytial virus infection in humans)

RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 . THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:495171 HCAPLUS Full-text

DOCUMENT NUMBER: 131:144606

TITLE: Preparation of heterocycl-yl-substituted methylidynetrisphenol derivatives and related compounds for treating or preventing pneumovirus infection and associated diseases

INVENTOR(S): Nitz, Theodore J.; Pevear, Daniel C.

PATENT ASSIGNEE(S): Viropharma Incorporated, USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

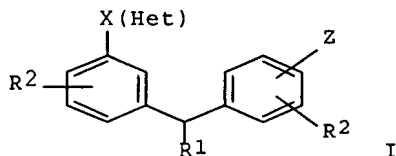
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9938508	A1	19990805	WO 1999-US1985	19990129
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2319465	A1	19990805	CA 1999-2319465	19990129
EP 1051169	A1	20001115	EP 1999-905546	19990129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9908522	A	20011002	BR 1999-8522	19990129
JP 2002501894	T	20020122	JP 2000-529241	19990129
NZ 505894	A	20021220	NZ 1999-505894	19990129
AU 759772	B2	20030501	AU 1999-25685	19990129
US 6495580	B1	20021217	US 1999-254690	19991018
MX 2000PA07394	A	20030801	MX 2000-PA7394	20000728
US 2003092685	A1	20030515	US 2002-280528	20021025
IN 2003DE00960	A	20050225	IN 2003-DE960	20030804
PRIORITY APPLN. INFO.:			US 1998-73038P	P 19980129
			US 1998-73078P	P 19980130
			WO 1999-US1985	W 19990129

IN 1999-DE959
US 1999-254690

A3 19990710
A3 19991018

OTHER SOURCE(S): MARPAT 131:144606
ED Entered STN: 10 Aug 1999
GI



AB The title compds. I [Het = 5-7 membered heterocyclic ring; R1 = H, halo, perfluoroalkyl, amino, etc.; R2 = H, OH, thio, alkoxy, etc.; X = N:CH, CH:N, N:N, etc.; Z = H, CHO, OH, X(Het)], useful for treatment of infections caused by viruses of the Pneumovirinae subfamily of Paramyxoviridae and diseases associated with such infections, were prepared E.g., 5,5'-bis[1-(((5-amino-1H-tetrazolyl)imino)methyl)]-2,2',4''-methylidynetrisphenol was prepared The antiviral activity of I toward pneumovirus was determined The cytotoxicity of I toward healthy cells was also determined

IC ICM A61K031-33

ICS A61K031-34; A61K031-38; A61K031-395; A61K031-40; A61K031-41;
A61K031-415; A61K031-42; A61K031-425; A61K031-435; A61K031-44;
C07D207-30; C07D207-32; C07D207-323; C07D207-33; C07D207-335;
C07D211-04; C07D211-80; C07D211-82; C07D211-84

CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 10

IT 235106-57-7P 235106-58-8P 235106-59-9P

235106-60-2P 235106-61-3P 235106-62-4P

235106-63-5P 235106-64-6P 235106-65-7P 235106-66-8P

235106-67-9P 235106-68-0P 235106-69-1P 235106-70-4P

235106-71-5P 235106-72-6P 235106-73-7P 235106-74-8P

235106-75-9P 235106-77-1P 235106-79-3P

235106-80-6P 235106-81-7P 235106-82-8P

235106-83-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclyl-substituted methylidynetrisphenol derivs. and related compds. for treating or preventing pneumovirus infection)

IT 235106-57-7P 235106-58-8P 235106-59-9P

235106-60-2P 235106-61-3P 235106-62-4P

235106-63-5P 235106-66-8P 235106-67-9P

235106-68-0P 235106-72-6P 235106-75-9P

235106-77-1P 235106-79-3P 235106-80-6P

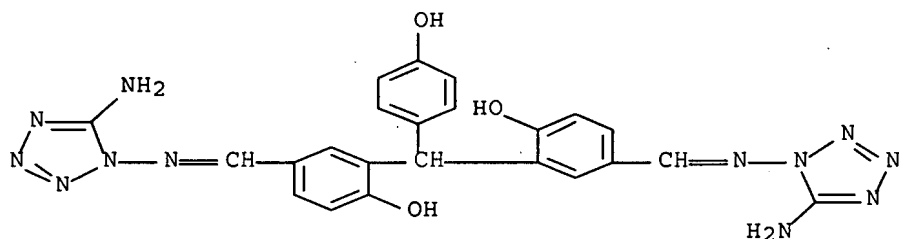
235106-81-7P 235106-83-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclyl-substituted methylidynetrisphenol derivs. and related compds. for treating or preventing pneumovirus infection)

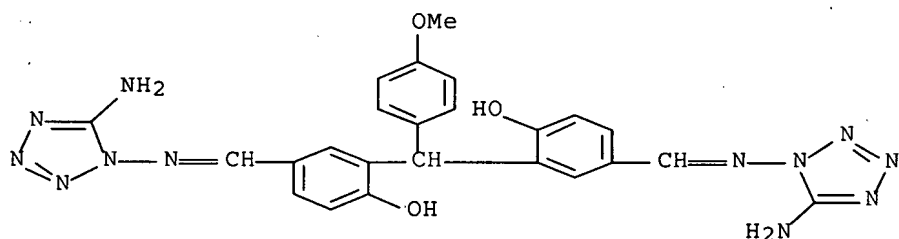
RN 235106-57-7 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-amino-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



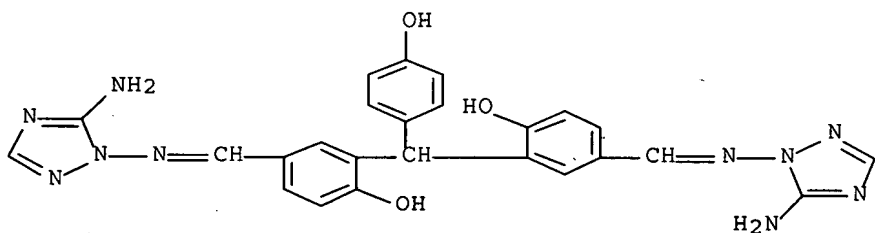
RN 235106-58-8 HCAPLUS

CN Phenol, 2,2'-[(4-methoxyphenyl)methylene]bis[4-[(5-amino-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



RN 235106-59-9 HCAPLUS

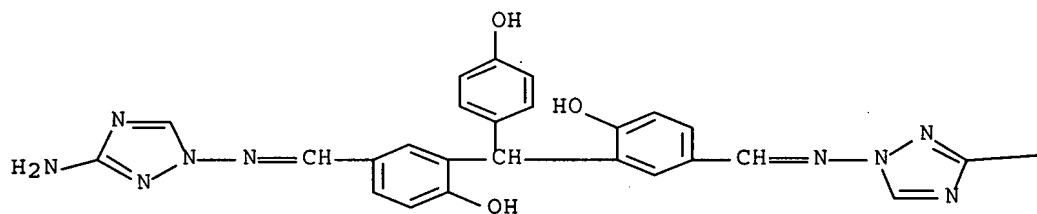
CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[(5-amino-1H-1,2,4-triazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



RN 235106-60-2 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[(3-amino-1H-1,2,4-triazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



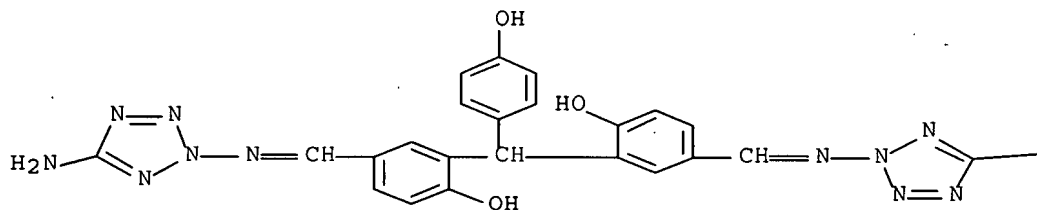
PAGE 1-B

—NH₂

RN 235106-61-3 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-amino-2H-tetrazol-2-yl)imino]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

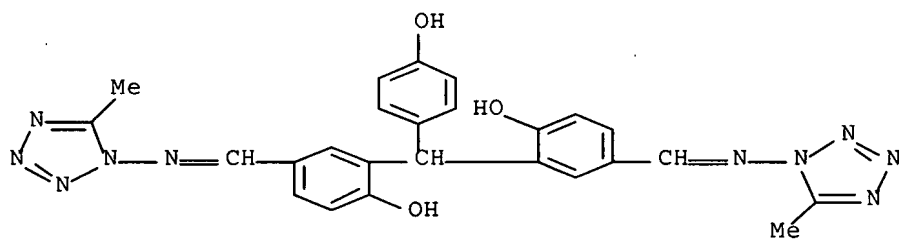


PAGE 1-B

—NH₂

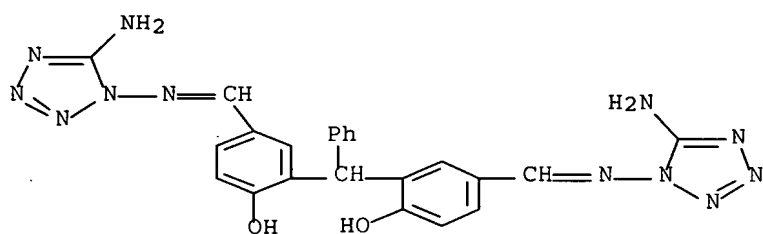
RN 235106-62-4 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



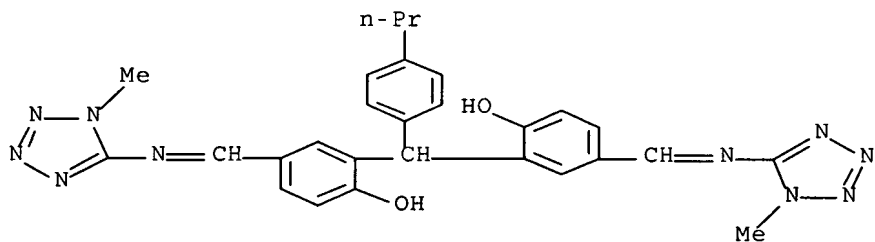
RN 235106-63-5 HCAPLUS

CN Phenol, 2,2'-(phenylmethylene)bis[4-[[5-amino-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



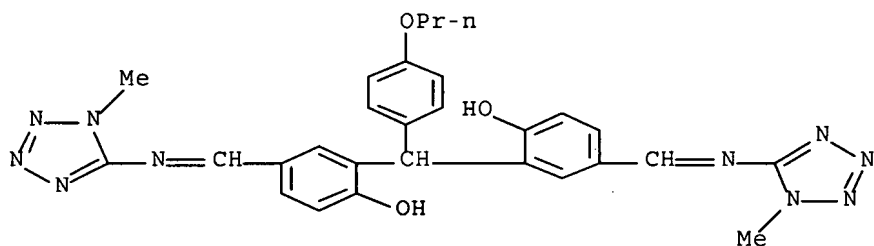
RN 235106-66-8 HCAPLUS

CN Phenol, 2,2'-[(4-propylphenyl)methylene]bis[4-[[1-methyl-1H-tetrazol-5-yl]imino]methyl]- (9CI) (CA INDEX NAME)



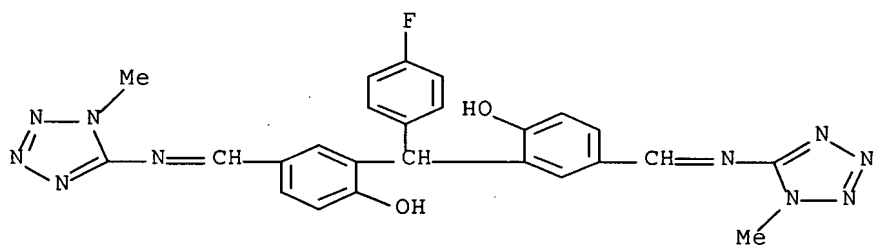
RN 235106-67-9 HCAPLUS

CN Phenol, 2,2'-[(4-propoxyphenyl)methylene]bis[4-[[1-methyl-1H-tetrazol-5-yl]imino]methyl]- (9CI) (CA INDEX NAME)



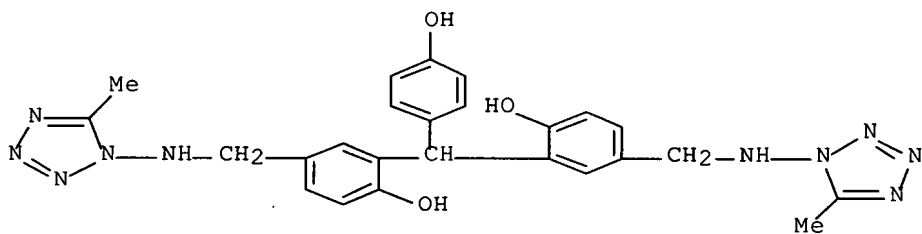
RN 235106-68-0 HCAPLUS

CN Phenol, 2,2'-[(4-fluorophenyl)methylene]bis[4-[(1-methyl-1H-tetrazol-5-yl)imino]methyl]- (9CI) (CA INDEX NAME)



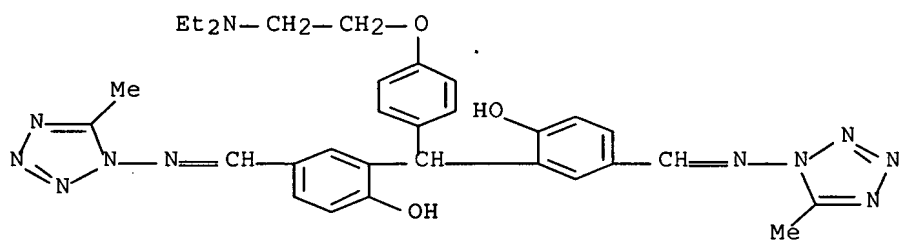
RN 235106-72-6 HCAPLUS

CN Phenol, 2,2'-[(4-hydroxyphenyl)methylene]bis[4-[(5-methyl-1H-tetrazol-1-yl)amino]methyl]- (9CI) (CA INDEX NAME)



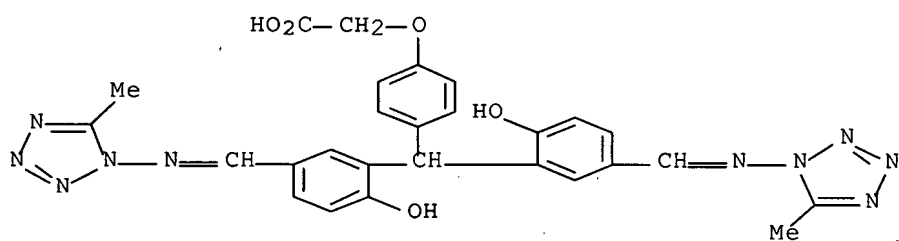
RN 235106-75-9 HCAPLUS

CN Phenol, 2,2'-[[4-[2-(diethylamino)ethoxy]phenyl]methylene]bis[4-[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



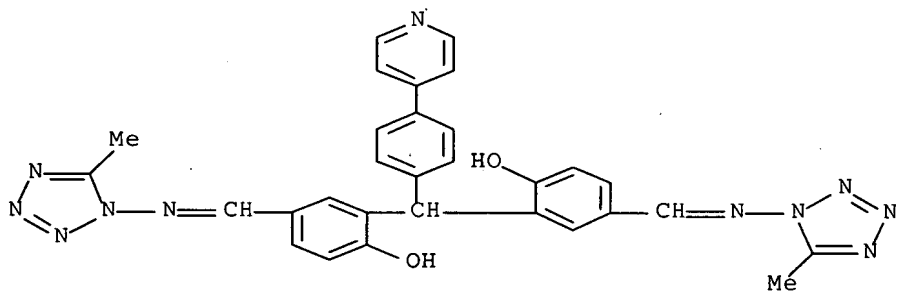
RN 235106-77-1 HCAPLUS

CN Acetic acid, [4-[bis[2-hydroxy-5-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]phenyl]methyl]phenoxy]- (9CI) (CA INDEX NAME)



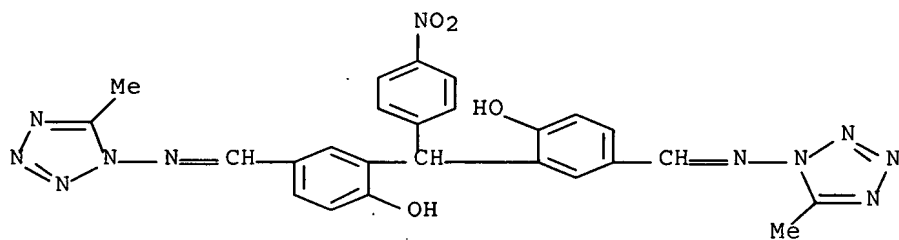
RN 235106-79-3 HCAPLUS

CN Phenol, 2,2'-[[4-(4-pyridinyl)phenyl]methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



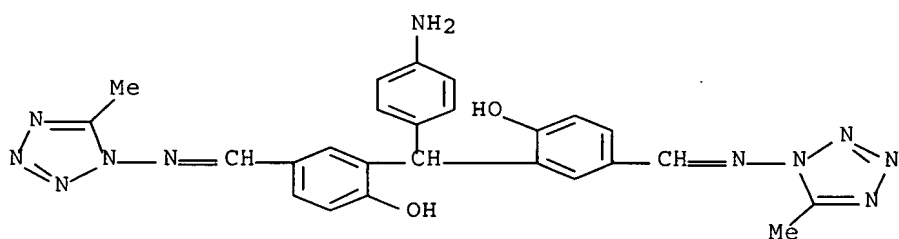
RN 235106-80-6 HCAPLUS

CN Phenol, 2,2'-[[4-(4-nitrophenyl)methylene]bis[4-[[5-methyl-1H-tetrazol-1-yl]imino]methyl]- (9CI) (CA INDEX NAME)



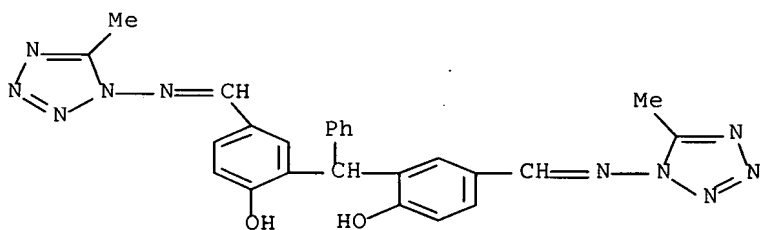
RN 235106-81-7 HCAPLUS

CN Phenol, 2,2'-[(4-aminophenyl)methylene]bis[4-[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



RN 235106-83-9 HCAPLUS

CN Phenol, 2,2'-(phenylmethylene)bis[4-[(5-methyl-1H-tetrazol-1-yl)imino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 12 OF 15 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:86109 BIOSIS Full-text

DOCUMENT NUMBER: PREV200500091113

TITLE: Prophylactic and therapeutic approaches against respiratory syncytial virus.

AUTHOR(S): Coviello, Silvina; Polack, Fernando P. [Reprint Author]
 CORPORATE SOURCE: Sch Publ Hlth, Johns Hopkins Univ, 615 N Wolfe St, E5202,
 Baltimore, MD, 21205, USA
 fpolack@jhsph.edu
 SOURCE: Current Medicinal Chemistry - Anti-Infective Agents,
 (January 2005) Vol. 4, No. 1, pp. 67-73. print. .
 ISSN: 1568-0126 (ISSN print).
 DOCUMENT TYPE: Article
 LANGUAGE: English
 ENTRY DATE: Entered STN: 2 Mar 2005
 Last Updated on STN: 2 Mar 2005

CC Biochemistry studies - General 10060
 Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
 Pathology - General 12502
 Pathology - Therapy 12512
 Respiratory system - Physiology and biochemistry 16004
 Respiratory system - Pathology 16006
 Pharmacology - General 22002
 Pharmacology - Clinical pharmacology 22005
 Pharmacology - Immunological processes and allergy 22018
 Pharmacology - Neuropharmacology 22024
 Pharmacology - Respiratory system 22030
 Pediatrics 25000
 Virology - General and methods 33502
 Immunology - General and methods 34502
 Medical and clinical microbiology - Virology 36006
 Chemotherapy - General, methods and metabolism 38502
 Chemotherapy - Antiviral agents 38506

IT Major Concepts
 Infection; Methods and Techniques; Pediatrics (Human Medicine, Medical
 Sciences); Pharmacology; Pulmonary Medicine (Human Medicine, Medical
 Sciences)

IT Parts, Structures, & Systems of Organisms
 respiratory system: respiratory system

IT Diseases
 respiratory syncytial virus infection: viral disease, drug therapy,
 immunology, pathology, prevention and control, transmission
 Respiratory Syncytial Virus Infections (MeSH)

IT Chemicals & Biochemicals
 BMS-433771: antiinfective-drug, antiviral-drug; CL387626:
 antiinfective-drug, antiviral-drug; DNA vaccines: antiinfective-drug,
 antiviral-drug, vaccine; RFI-641: antiinfective-drug, antiviral-drug;
 RhoA: antiinfective-drug, antiviral-drug; VP-14637: antiinfective-drug,
 antiviral-drug; agonist bronchodilators: adrenergic agonist-drug,
 autonomic-drug, bronchodilator-drug; attenuated vaccines:
 antiinfective-drug, antiviral-drug, vaccine; epinephrine: adrenergic
 agonist-drug, autonomic-drug, bronchodilator-drug, decongestant-drug;
 palivizumab: antiinfective-drug, antiviral-drug; ribavirin:
 antiinfective-drug, antiviral-drug; subunit vaccines: immunologic-drug,
 immunostimulant-drug, vaccine

IT Methods & Equipment
 vaccination: clinical techniques

IT Miscellaneous Descriptors
 hospitalization cause; viral pathogenesis; viral protection mechanism

GT USA (North America, Nearctic region)

ORGN Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name

human (common): child, infant, host

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGN Classifier

Paramyxoviridae 03503

Super Taxa

Negative Sense ssRNA Viruses; Viruses; Microorganisms

Organism Name

Respiratory syncytial virus (common) [RSV (common)]: pathogen

Taxa Notes

Microorganisms, Negative Sense Single-Stranded RNA Viruses, Viruses

RN 197365-88-1 (CL387626)

197366-24-8 (RFI-641)

235106-62-4 (VP-14637)

51-43-4 (epinephrine)

188039-54-5 (palivizumab)

36791-04-5 (ribavirin)

L52 ANSWER 13 OF 15 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
STN

ACCESSION NUMBER: 2004:4071 BIOSIS Full-text

DOCUMENT NUMBER: PREV200400004679

TITLE: VP-14637 and R-170591 share the same mechanism of activity
against respiratory syncytial virus (RSV).

AUTHOR(S): Cihlar, T. [Reprint Author]; Douglas, J. L. [Reprint
Author]; Panis, M. L. [Reprint Author]; Ho, E. S. [Reprint
Author]; Lin, K. Y. [Reprint Author]; Krawczyk, S. H.
[Reprint Author]; Cai, R. [Reprint Author]; Swaminathan, S.
[Reprint Author]

CORPORATE SOURCE: Gilead Sciences, Foster City, CA, USA

SOURCE: Abstracts of the Interscience Conference on Antimicrobial
Agents and Chemotherapy, (2003) Vol. 43, pp. 491. print.
Meeting Info.: 43rd Annual Interscience Conference on
Antimicrobial Agents and Chemotherapy. Chicago, IL, USA.
September 14-17, 2003. American Society for Microbiology.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 17 Dec 2003

Last Updated on STN: 17 Dec 2003

AB Background: RSV is a major cause of respiratory tract infections in newborn,
elderly, and immunocompromised patients. However, no safe and efficacious
treatment is currently available for RSV disease. Here, we report data on the
mechanism of action of VP-14637 and R-170591, two recently identified small-
molecule RSV inhibitors with potent in vitro and in vivo activity. Results:
VP-14637 and R-170591 are both active in RSV fusion assay with EC50=6.5 and
0.9 nM, respectively. Several drug-resistant RSV variants were selected in
vitro in the presence of each compound. All selected viruses exhibited cross-
resistance to both inhibitors and contained various single amino acid
substitutions in two distinct regions of the viral F protein, the heptad
repeat 2 (HR2; mutations D486N, E487D, and F488Y) and the intervening domain
between heptad repeat 1 (HR1) and HR2 (mutations K399I and T400A). No
mutations arose in HR1, as might be expected for an inhibitor that directly
disrupts the heptad repeat interaction. Interaction studies using (3H)VP-
14637 revealed a specific binding of the compound to RSV-infected cells (Kd=5
nM) that was efficiently inhibited by R-170591, but not by the HR2-derived
peptide. Further analysis using a transient T7 vaccinia expression system
indicated that the RSV F protein is sufficient for binding of VP-14637. F
proteins containing either the VP-14637 or R-170591 resistance mutations
exhibited greatly reduced interaction with VP-14637. Despite segregation with

the membrane fraction following incubation with intact RSV-infected cells, the compound did not bind to membranes isolated from RSV-infected cells. In addition, binding of VP-14637 was temperature-dependent. Conclusion: VP-14637 and R-170591 inhibit RSV at the step of viral fusion. They both act through the same mechanism that may involve their interaction with a transient conformation of the RSV F protein.

CC General biology - Symposia, transactions and proceedings 00520
Pathology - Therapy 12512
Respiratory system - Pathology 16006
Pharmacology - General 22002
Virology - General and methods 33502
Medical and clinical microbiology - Virology 36006
Chemotherapy - General, methods and metabolism 38502
Chemotherapy - Antiviral agents 38506
IT Major Concepts
Infection; Pharmacology
IT Diseases
respiratory syncytial virus infection: respiratory system disease,
viral disease
Respiratory Syncytial Virus Infections (MeSH)
IT Chemicals & Biochemicals
R-170591: antiinfective-drug, antiviral-drug, pharmacodynamics;
VP-14637: antiinfective-drug, antiviral-drug, pharmacodynamics; viral F
protein
IT Miscellaneous Descriptors
drug resistance; viral fusion
ORGN Classifier
Paramyxoviridae 03503
Super Taxa
Negative Sense ssRNA Viruses; Viruses; Microorganisms
Organism Name
Respiratory syncytial virus (common): pathogen
Taxa Notes
Microorganisms, Negative Sense Single-Stranded RNA Viruses, Viruses
RN 235106-62-4 (VP-14637)

L52 ANSWER 14 OF 15 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
STN

ACCESSION NUMBER: 2003:221525 BIOSIS Full-text
DOCUMENT NUMBER: PREV200300221525
TITLE: VP 14637: Two-week inhalation toxicity study in neonatal
dogs.
AUTHOR(S): Lee, W. W. [Reprint Author]; Davies, M. H.; Viau, A.
[Reprint Author]; Hincks, J. R.; Rhodes, G.; Adjiri-Awere,
A.; Nash, J. A.; Gordon, C. [Reprint Author]
CORPORATE SOURCE: Inhalation Toxicology, CTBR, Senneville, PQ, Canada
SOURCE: Toxicological Sciences, (March 2003) Vol. 72, No. S-1, pp.
290-291. print.
Meeting Info.: 42nd Annual Meeting of the Society of
Toxicology. Salt Lake City, Utah, USA. March 09-13, 2003.
Society of Toxicology.
ISSN: 1096-6080 (ISSN print).
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 7 May 2003
Last Updated on STN: 30 Jun 2003

CC General biology - Symposia, transactions and proceedings 00520
Biochemistry studies - General 10060
Toxicology - General and methods 22501

Virology - General and methods 33502

IT Major Concepts
 Biochemistry and Molecular Biophysics; Toxicology

IT Chemicals & Biochemicals
 VP 14637 [phenol, 2,2-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]]]

ORGN Classifier
 Canidae 85765
 Super Taxa
 Carnivora; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 dog (common): neonate, female, male
 Taxa Notes
 Animals, Carnivores, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

ORGN Classifier
 Paramyxoviridae 03503
 Super Taxa
 Negative Sense ssRNA Viruses; Viruses; Microorganisms
 Organism Name
 respiratory syncytial virus (common)
 Taxa Notes
 Microorganisms, Negative Sense Single-Stranded RNA Viruses, Viruses

RN 235106-62-4 (VP 14637)
 235106-62-4 (phenol, 2,2-[(4-hydroxyphenyl)methylene]bis[4-[[[(5-methyl-1H-tetrazol-1-yl)imino]methyl]])

L52 ANSWER 15 OF 15 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:277128 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200300277128
 TITLE: Inhibition of respiratory syncytial virus fusion by the small molecule, VP-14637 via specific interactions with the F protein.
 AUTHOR(S): Douglas, J. L. [Reprint Author]; Panis, M. L. [Reprint Author]; Ho, E. [Reprint Author]; Lin, K.-Y. [Reprint Author]; Krawczyk, S. H. [Reprint Author]; Grant, D. M. [Reprint Author]; Cai, R. [Reprint Author]; Swaminathan, S. [Reprint Author]; Cihlar, T. [Reprint Author]
 CORPORATE SOURCE: Gilead Sciences, Foster City, CA, USA
 SOURCE: Antiviral Research, (February 2003) Vol. 57, No. 3, pp. A90. print.
 Meeting Info.: Sixteenth International Conference on Antiviral Research. Savannah, GA, USA. April 27-May 01, 2003.
 ISSN: 0166-3542 (ISSN print).
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 11 Jun 2003
 Last Updated on STN: 1 Aug 2003

CC General biology - Symposia, transactions and proceedings 00520
 Biophysics - Membrane phenomena 10508
 Pathology - Therapy 12512
 Respiratory system - Pathology 16006
 Pharmacology - General 22002
 Virology - General and methods 33502
 Medical and clinical microbiology - General and methods 36001
 Medical and clinical microbiology - Virology 36006
 Chemotherapy - General, methods and metabolism 38502

Chemotherapy - Antiviral agents 38506

IT Major Concepts
 Infection; Pharmacology

IT Parts, Structures, & Systems of Organisms
 membranes

IT Diseases
 respiratory syncytial virus infection: infectious disease, respiratory
 system disease, viral disease
 Respiratory Syncytial Virus Infections (MeSH)

IT Chemicals & Biochemicals
 VP-14637: antiinfective-drug, antiviral-drug, mechanism of action,
 binding; viral fusion protein [viral F protein]: conformation, heptad
 repeat 1, heptad repeat 2, intervening domain, mutations

IT Miscellaneous Descriptors
 drug resistance

ORGN Classifier
 Paramyxoviridae 03503
 Super Taxa
 Negative Sense ssRNA Viruses; Viruses; Microorganisms
 Organism Name
 respiratory syncytial virus (common) [RSV (miscellaneous)]: pathogen
 Taxa Notes
 Microorganisms, Negative Sense Single-Stranded RNA Viruses, Viruses

ORGN Classifier
 Poxviridae 03110
 Super Taxa
 dsDNA Viruses; Viruses; Microorganisms
 Organism Name
 Vaccinia virus (species): expression system
 Taxa Notes
 Double-Stranded DNA Viruses, Microorganisms, Viruses

RN 235106-62-4 (VP-14637)